INTERNATIONALIZATION STRATEGIES OF LIBERAL ARTS INSTITUTIONS IN A GLOBALIZING ECONOMY

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December, 14, 2012

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Patrick D. Alles

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The complex forces of globalization have transformed higher education institutions in two significant ways. First, they have been compelled to emphasize curricula and degree programs that complement the demands of the contemporary global economy. Second, their drive to expand existing dimensions of internationalization has become a new component of institutional competition for students, faculty, and revenue. In response, efforts have emerged to measure this increased level of internationalization, but these efforts are inadequate because they are based on subjective methods, an almost exclusive focus on large public institutions, but most importantly focus on inputs rather than student learning. As a result, contributions to the global economy from small and medium sized liberal arts institutions (SMLACs) are largely discounted. Therefore, this research seeks to bring attention to the liberal arts curriculum found at most U.S. institutions, but which is vigorously promoted at SMLACs, as well as the unique contribution of place to the undergraduate experience at SMLACs. It is argued that it is the nature of a liberal arts program to develop a student's global competence – the knowledge, skills, and attitudes that are necessary for graduates to function effectively in the global marketplace. From this, it is argued that bachelor degree graduates from SMLACs are better prepared to function in the global economy. This is tested using a mixed methods approach starting with the development of a higher education internationalization (HEI) index that emphasizes the global nature of a liberal arts curriculum using readily available data. This is followed by a survey and interviews with administrators at SMLACs in Indiana, as well as a review of institutional strategic plans. Results indicate that SMLACs

have a significantly higher HEI index, but this is achieved through targeted strategies, primarily emphasis of study abroad and, to a lesser extent, the recent emphasis of global focus of the curricula and foreign languages. One significant finding is despite the competitive forces introduced by the trend toward increased internationalization, SMLACs show few signs of institutional stress, and decisions to internationalize are based on their contributions to student learning, not to position the institution in higher education marketplace.

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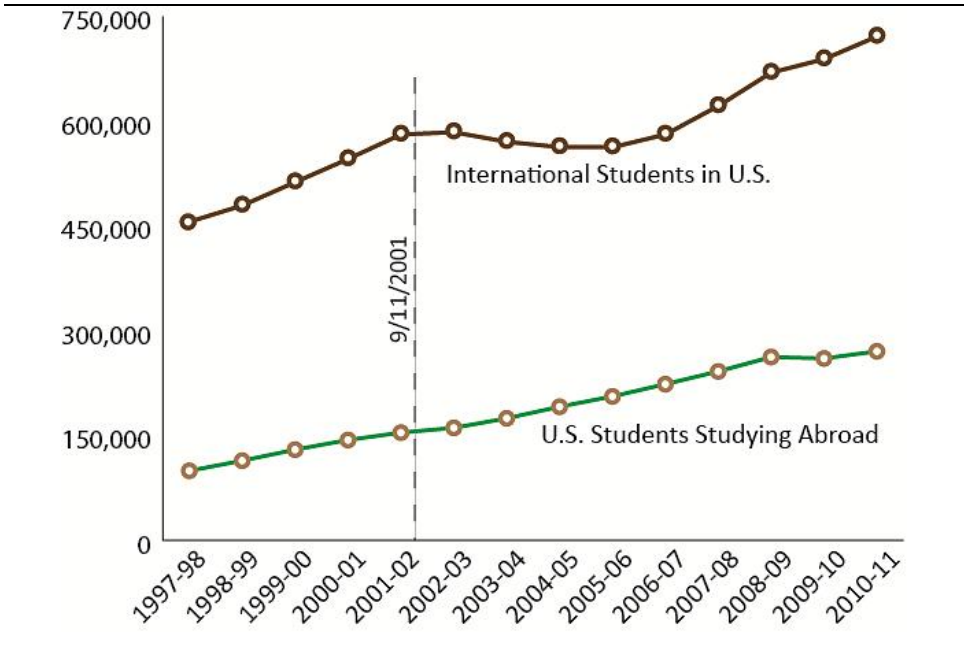
CHAPTER 1: INTRODUCTION

Higher education in the United States has been undergoing a new period of internationalization driven by the demands of the increasingly knowledge-based global economy for a highly-educated workforce as well as for knowledge creation and innovation, particularly in science, technology, and engineering. This has generated a demand for higher education that has produced some of the highest levels of enrollments the U.S. has seen. In 2009, over 20 million students were enrolled in one of over 5400[1] higher education institutions in the U.S. The increased demand by students for an education appropriate to the new global economy has forced institutions to become more competitive by demonstrating the appropriateness of their curriculum to the demands of the knowledge economy with students increasingly pursuing degrees in fields that have direct linkages to occupations in demand in the U.S. (Altbach and Knight 2007). Like many traditional firms, higher education institutions are responding to market pressure by pursuing internationalization strategies to expand their academic and operational activities to attract students (especially international students), remain competitive, and improve quality (Knight 2004, Van Der Wende 1996). Hazelkorn (2008) likens the competition for "brainpower" among institutions to the more traditional geopolitical struggle for natural resources where institutions aggressively pursue both domestic and international sources of students. One key aspect of this competition is the drive to attract students from other countries to attend college in the United States. While U.S. institutions compete against each other to enroll students wanting to study in the U.S.,

[1] This represents the number of 2-year and 4-year institutions from all sectors (public, not-for-profit, and for profit in 2011-12. If institutions that offer less than 2-year programs are included, the total number of institutions is 7559.

institutions from other countries have been increasingly successful in attracting foreign students. Hazelkorn (2008) points out that in Australia education is now the third largest "export" (behind coal and iron ore). In addition, a recent report by the American Council on Education (ACE) shows that while the U.S. continues to maintain the largest market share of international students, that share slipped from 22.9% in 2000 to 18% in 2009, with Australia, Canada, and France showing gains (American Council on Education 2011a). Much of this drop is explained by U.S. foreign policy in the wake of 9/11 as well as the increase in intervening opportunities presented by the increase in educational capacity in countries besides the U.S. Despite this slip in U.S. market share for international students, Figure 1 indicates that overall *student exchange* – U.S. students studying abroad and international students enrolling in U.S. institutions – continues to grow.

Figure 1.1. Trends in Student International Mobility: 1997 to 2011



Source: "Open Doors", Institute for International Education, 2011

This drive to internationalize the university is driven largely by a response to the discourse surrounding the contested concept of globalization which has become deeply embedded in scholarly thinking on economic development and social change (Giddens 1990, Hirst and Thompson 2002). The result is the rise of the "global university" and is a new dimension of competition in an industry that has always been very competitive, and the battle for international students is just one of a number of important areas institutions compete against each other. While U.S. institutions compete against institutions in other countries for talented foreign students, they also compete for those same students against other U.S. institutions. Institutions, primarily public institutions, must strike a balance in their competition to attract foreign students as state legislators and the general public expects these institutions to enroll state residents, which is the primary justification for the state support they receive.

To make the matter more complex, the federal government has taken an active interest in controlling college costs in response to what is believed to be a situation where college tuitions are "spiraling" out of control, with the dream of a college education perceived to be increasingly out of reach for the typical middle class family in the United States[2]. The economic recession that began in the U.S. in 2008 has given rise to an effort to raise the educational attainment among Americans as a way to restore American economic competitiveness. This has heightened concern, however, over the increasing price of a college education acting as an obstacle to this effort. To address the problem, the federal government has begun a consumer information campaign that includes extensive information about each college eligible to participate in its federal aid

[2] A Federal Reserve Bank of New York report showed aggregate student loan debt surpassed consumer credit card debt in the first quarter of 2012. The Consumer Financial Protection Bureau, a federal agency, reports that total student loan debt surpassed the $1 trillion mark.

programs. This includes information about cost, academic offerings, and graduation rates, and student loan debt to name a few. In addition, a "college affordability and transparency list" was developed to highlight the most- and least-expensive institutions and those with the highest and lowest net price of attendance (cost minus grant aid). Furthermore, new policies have been proposed aimed at discouraging institutions from substantial tuition increases. One such proposal would reduce or cut an institution's eligibility for federal financial aid (e.g. Pell grants and student loans) if their tuition increases are above a certain level (The White House, Office of the Press Secretary 2012). Institutions are confronted by such federal policies at a time when states have cut back support for higher education due to state budget shortfalls, leaving institutions caught between the two and and with few avenues to contain tuition prices. Among the options available is to explore cost saving measures university wide; another is to adjust their enrollment management strategies to shift admissions toward students with the ability to pay full tuition. This most often includes both international students as well as out-of-state students – neither of which endears them to policy makers looking to the institution to educate constituents and their children.

Further complicating the matter, institutions have been put on notice by state and federal policy makers with their aspirations of raising the degree attainment levels in the U.S. in order to maintain national economic competitiveness. Recent data from the Organization for Economic Cooperation and Development (OECD) points out that other nations have exceeded the U.S. in the level of degree attainment among working age adults. In 2009, the U.S. ranked 4th among OECD countries in educational attainment of the population aged 25-64 (Organization of Economic Development and Cooperation

2011). However, the U.S. stands to lose further ground with countries like Korea and Japan, and a number of other countries like Canada and Ireland who are educating young adults at the postsecondary level at a rate significantly higher than the U.S. In 2009, the US ranked 14th in educational attainment among the population aged 25-34 (see Table 1). In response, the Obama administration along with a number of states have set goals to increase degree attainment and completion rates in order to restore the United States as the country with the most educated population and workforce (U.S. Department of Education 2011). Such policies act to put further pressure on institutions to educate domestic students, contain cost, improve (or at least maintain) quality, all while they are compelled to enroll more out-of-state students (including foreign students) for their ability to pay full tuition and their high scholastic aptitude.

Table 1.1 OECD Member Educational Attainment Levels

	Age 25-34	Age 25-64
Korea	63%	39%
Japan	56%	44%
Canada	50%	50%
Ireland	48%	36%
New Zealand	47%	40%
Norway	47%	37%
Australia	45%	37%
Denmark	45%	34%
United Kingdom	45%	37%
Luxembourg	43%	35%
Israel	43%	45%
France	43%	29%
Belgium	42%	33%
Sweden	42%	33%
United States	**41%**	**41%**

Source: Education At A Glance, 2011. Organization of Economic Cooperation and Development.

International student recruitment is but one of a number of expanding new fronts that institutions must incorporate in this new era of competition. Indeed, internationalization includes a number of facets that include both the hosting of international students as well as providing study abroad opportunities for domestic students. Institutions are also driven to provide faculty similar international enrichment opportunities in the areas of teaching, research, and professional development. Academic departments within institutions also wish to attract foreign faculty – both visiting and permanent – to enhance the academic and cultural richness of the curriculum. Institutions with sufficient resources and recognition are also increasingly likely to pursue international partnerships with foreign institutions to create additional opportunities for students and faculty in both countries. Some institutions even open branch campuses in foreign countries. In rare cases, transnational, multi-university partnerships are established. All of these approaches are intended to have the dual effect of improving the quality of the student learning outcomes and experiences as well as increasing institutional presence in the higher education market which has increasingly become international in nature.

Practically all institutions experience these competitive pressures and policy mandates to varying degrees, yet much of the research on higher education internationalization has centered on the role of large research universities (typically publicly supported) that generate commodified or patentable knowledge with value to the global marketplace (Childress 2009, American Council on Education 2005a, 2005b). Much less attention is given to the role small and medium-sized liberal arts colleges

(referred to as SMLACs in this research[3]) play in knowledge creation or preparing graduates for the global economy.

A recent study by the American Council on Education (ACE) indicates that 59% of all research universities scored "medium high to high" on their 'internationalization index', compared to only 21% for liberal arts institutions. (American Council on Education 2005a, 2005b). A study by Childress (2009) of institutions with well-developed internationalization plans employed a sample of 31 institutions, 61% of which were doctoral granting, and 71% were public institutions. Another study by ACE on student perspectives on internationalization was based on a sample of 9,279 student responses – only 7.9% of those students were from institutions classified as liberal arts (American Council on Education 2005c). These examples illustrate the degree to which the focus of internationalization in higher education is on large research, doctoral granting public institutions.

Additional evidence of the difficulty SMLACs face when competing on an international scale can be found when considering the criteria used to develop the *Academic Ranking of World Universities* (AWRU), an effort by the Institute of Higher Education at the Chinese institution Shanghai Jiao Tong (Liu and Cheng 2005). The ranking uses the following criteria to develop a list of the top 500 world universities:

[3] The term "liberal arts" as used in this research includes institutions classified as liberal arts in the Carnegie classification as well as other institutions whose primary focus is a liberal arts curriculum, even though they may be considered comprehensive or even doctoral granting institutions in the Carnegie schema.

- Number of Nobel laureates[4]
- Number of Field Medal recipients
- Number of highly cited researchers
- Number of articles published in journals (such as *Science* or *Nature*)
- Number of journal articles indexed by Science Citation Index-Expanded and/or Social Science Citation Index.

Such criteria make it extremely difficult for SMLACs to be considered a world-ranked university as the criteria focuses largely on an institution's research portfolio while most SMLAC institutions are teaching oriented. However, an institution appearing on the ARWU list will be more attractive to students looking to attend a top ranked institution leaving SMLACs at a disadvantage in the international student market. As a result some SMLACs struggle to recruit sufficient numbers of international students to adequately meet internationalization goals.

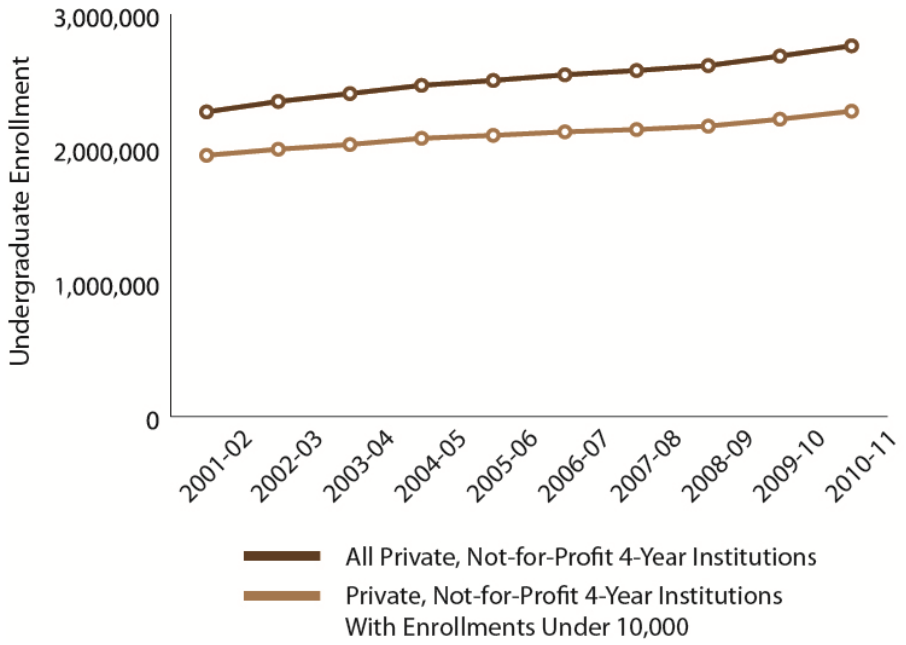
There are several important reasons why it is critical to include SMLACs in research on internationalization. It is equally important to include them as key participants in state and federal policies aimed at improving the United States' competitive stance in the global economy. First, there are more of these types of institution in the U.S. than any other. Second, even though their collective enrollment is smaller than public institutions, they have significantly higher graduation rates and shorter time to completion making them more productive and efficient at educating students – students entering these institutions are more likely to enter the workforce sooner which is especially important for high demand fields (as well as minimizing cost and student debt). Third, their institutional missions and pedagogical philosophy are most often uniquely focused on a liberal arts education which, it is argued, continues to have social and economic relevance in the contemporary global economy despite being

[4] Data for both Nobel laureates and Field Medal winners include both institutional staff and alumni.

overshadowed by the science, technology, engineering and mathematics fields (STEM) (Schneider 2008, Vallas and Kleinman 2008). Perhaps most importantly, because these institutions contribute to the knowledge economy by producing graduates well prepared to contribute to the global economy, it is imperative that strategic paths be developed that will help them become more engaged in internationalization using similar means to those found at large research institutions, so as not to become increasingly "moribund and irrelevant" (Altbach 2005 65). Despite this warning, relatively few institutions have closed their doors due to the pressure in this era of internationalization. In fact, enrollments at SMLACs on the whole are increasing, a point that will be explored in more depth as it may provide further evidence of the enduring relevance of a liberal arts education to the global economy (see Figure 1.2).

It is understandable why SMLACs are typically overlooked in research and policy initiatives on internationalization and the global economy. Being largely not-for-profit and independently controlled they have operated outside of state and federal policy or regulations to a much greater extent than their publicly controlled (and publicly funded) counterparts. Many SMLACs also have some form of church or religious affiliation, which often acts to put additional distance between the institution and formal government policy. In the United States, 62% of all higher education institutions are private, representing 26% of all enrollment, yet represent 38% of all degrees awarded in the country (37% of all bachelor's degree). The average size of private, not-for-profit institutions is 2,460 students, slightly above the for-profit institutions at 2,380. However, the average size of public, 4-year institutions is 11,450 students.

Figure 1.2. Undergraduate Enrollment Trends at All U.S. Private, Not-for-Profit 4-Year Institutions



Source: Integrated Postsecondary Education Data System, U.S. Department of Education.

Liberal Arts Programs and the Learning Economy

The emergence of the knowledge economy or "learning economy" is a product of increased use of information and advances in information and communications technology and policy.[5] As the pace of scientific and technological advance quickens, greater value is placed on individuals who can learn rapidly (Hodgson, 1999). Such 'knowledge intensity' is creating a demand for creativity and innovation and places an emphasis on individuals who can learn quickly – traits that are becoming the most sustainable forms of competitive advantage for firms, regions, and nations (Florida 2002b, Stata 1989). Friedman (2005) emphasizes the importance of liberal arts education

[5] See, for example, Gregerson & Johnson (1997) who cite changes in information and communications technology (ICT), the process of innovation, the knowledge infrastructure, and government policies as conditions that have led to the emergence of the modern learning economy.

by referencing the success of corporate leaders in innovation that benefitted from being able to make connections based on their training in multiple disciplines such as history, politics, art and science. Complex, knowledge-intensive environments require individuals who are not highly-skilled in one field, but those who possess sophisticated cognitive abilities to learn how to learn that allow them to adapt to new processes and new technologies over time. A foundation in the liberal arts imparts an 'intellectual superstructure for how knowledge is established from field to field' (Fong 2010). Education is the ultimate act of investment in the future, and liberal education, enriched by a diverse international dimension, forms the foundation of that investment (Schneider 2008).

A parallel to the 'cross-fertilization' liberal arts degrees provide is found in industrial diversity in the literature on agglomeration economies that show the regional development advantages of externalities gained when different industries locate in the same industrial area (Florida 2002b). Currid and Connolly (2008) detail how the advanced services industry of New York City is enhanced by the presence of the art and culture and media industries. The industrial U.S. created large numbers of jobs that did not require high levels of skill or knowledge. Global competition and technological advances have eliminated those jobs or have seen them move to lower labor cost areas of the world. The subsequent economic shift from an industrial to a knowledge-based economy has brought with it increased demand for intellectual activity that places a premium on creativity, problem-solving, and an interdisciplinary approach that results primarily from education, particularly higher education (Brint 2001, Florida 2002a, Friedman 2005). A liberal arts education develops the intellect by providing these skills

as well as critical thinking, leadership, and moral reasoning – skills not directly taught in a strictly math or science discipline (Schneider 2008, Blaich, et al. 2003). Indeed, about one-third of medical schools have departments of humanities within them, and many others offer electives within such seemingly disparate fields such as literature, philosophy, sociology, anthropology, and ethics (McGrath 2002).

Because of the shift to a globalized, knowledge-based economy, liberal arts institutions and programs are entering a critical period in their long history in U.S. higher education. Long having served as the model philosophy for higher education in America, and the basis upon which it achieved dominant world leadership, the liberal arts are being challenged by the contemporary emphasis on occupational and professional fields such as business, nursing, computer science, and engineering – to name a few – that have been seen by policymakers as in short supply (Schneider 2008).[6] In response, liberal arts institutions have initiated a conversation to reassert and strengthen the long held belief that liberal education and liberal arts programs remain not only instrumental to sustained economic growth, they are crucial to an engaged citizenry in a free society (Schneider 2008, Blaich, et al. 2003). It is important to clarify that liberal arts education is not the express domain of liberal arts institutions. Indeed, a strong liberal arts tradition and curriculum exists at many institutions regardless of size or institutional type (Lindsay, et al. 2005, Breneman 1994). However, greater emphasis is placed on mastering a set of key liberal arts competencies at liberal arts institutions.

[6] The impact of globalization and the resultant economic challenges to higher education institutions is likely to vary by institution due to a number of factors including institutional control, institutional size and mission, dependence on tuition, and national and international reputation, to name a few. SMLACs were affected by globalization later than large, public institutions and SMLACs are less immediately affected by economic cycles. Public institutions are likely to be among the first to be impacted. However, the longer and more protracted an economic recession, the more likely it is to impact an increasing number of institutions.

The liberal arts have long been characterized as "learning for its own sake" since it has no direct vocational linkage or explicit practical purpose compared to fields like nursing and computer science. The liberal arts education is often promoted as a means to become a well-rounded individual. By exploring major scientific and human questions, a liberal arts student is able to become well-versed in a broad literature from different disciplines resulting in strong integrative and intellectual skills. It has been argued that even the fine arts have an easier time making the case that the curriculum better prepares a graduate for a profession (Agresto 2002). Advocates for the liberal arts education hold the view that shaping "the intellectual maturation of young people and widening their cultural horizons has traditionally been the strength and the mission of American undergraduate education" (Geiger 1980, 54).

In many ways, the British "college" supplied the prototype model for undergraduate education in the United States. The colonial colleges and the many hundreds of private colleges that were founded in the next 250 years were in several respects predicated on that model: A primary commitment to educating the undergraduate in a residential setting that not only removes the student from the home, but also permits and encourages close student-student and student-faculty contact, smallness, and a sense of history and tradition that generates a strong sense of community. This sense of community is manifested in many ways, including alumni loyalty, the strong student interest in team sports, and the friendly rivalries that evolve between neighboring colleges. As Astin (2000) characterized the liberal arts model:

> This study has shown, once again, that this traditional model of undergraduate education leads to favorable educational results across a broad spectrum of cognitive and affective outcomes and in most areas of student satisfaction (p. 413).

The value of a liberal arts degree is not always immediately appreciated, particularly when measured by its ability to secure gainful employment. For example, a recent survey of college graduates entering the workforce offers some reflections on what they might have done differently while in college. The most popular response (37%) indicates they would have been more careful in choosing their major. Although no details were given about what major those students would have chosen, they were subsequently asked what classes they would have taken more of. More than half indicated they would have taken more computer and technology classes. Another group indicated more business and finance classes (36%) and yet another group identified quantitative skills courses (34%). The more traditional liberal arts classes were farther down the list, including writing classes (24%) and speaking classes (15%). As a final exclamation point on the growing emphasis on practical academic programs, those respondents who indicated they would have chosen a different major, 41% of survey respondents indicated that they would have chosen a professional major, like communications, education, nursing, or social work (The Brookings Institution, 2012).

Survey research of this nature fails to provide a context for the job market these recent college graduates faced and the basic fact persists that there is imperfect information between what majors the job market demands and job openings for those students upon graduation. Students often choose a major based on predicted job demand and reported starting salary – a reality that may have changed 4, 5, or 6 years later when the student graduates (Government Accountability Office 2007, Fogg and Harrington

2011, Hart Research Associates 2010). Even if market conditions persist, it is unlikely that market demand for new hires will closely match the supply of recent college grads specifically trained for that field, which might explain the dissatisfaction expressed in the survey findings, a situation exacerbated by a protracted global recession.

One curious aspect of the changing attitudes towards liberal education is that the industrial diversity and global complexities that characterize today's economy would utilize a liberal education far more so than it would have during America's industrial period of the middle to late 20th century. Brint (2005) demonstrates that the liberal arts constituted the largest proportion of degrees awarded by American institutions for most of the early part of the 20th century. That dominance began to erode during the 1930's when the proportion of occupational/professional degrees began to increase, ultimately surpassing the 50% mark. That trend continued into the 1960's when the liberal arts rose once again surpassing 50% of all degrees. Since the 1970's, occupational/professional degrees once again regained the majority position increasing to over 60% of all degrees. College degrees awarded since 1970 indicate that practical and vocational fields have been increasing faster in the past 40 years while mainstream liberal arts fields have been holding even or declining. Since 1970, business has become the number one major, capturing over 20% of all degrees awarded, replacing education, which has moved from the top field in 1970 to fourth in 2009. Social sciences and history combined have consistently held the number two spot, but have dropped from almost 1 in 5 degrees awarded in 1970 to 1 in 10 in 2010. Increasingly, the question is being raised as to the utility of pursuing a liberal arts degree if there is no clear or immediate economic gain in the face of rising college tuition, often funded through increased student loan debt.

Related to this trend are the findings by Kuh (1999) that self-reported gains by American college students declined in the 1990's compared to college students in the 1960's in their awareness of different philosophies and cultures; in understanding and appreciating science, literature and the arts; and in personal development. This coincides with the peak in the 1960's of the liberal arts resurgence as measured by degrees awarded. Adelman (1999) attributed this trend to lower levels of course taking in the arts and sciences fields during this period.

In order to make a strong argument for the marketability of a liberal arts degree, advocates often rely upon the attributes employers say they want new hires fresh out of college to possess. Several studies have been conducted to determine employer's views of the role a liberal arts education has on their workforce needs and hiring practices. Survey research indicates that employers seek a set of skills of recent graduates that aligns with key learning outcomes of a liberal arts education. One study of employer attitudes toward graduates with liberal arts degrees found that employers valued interpersonal communications and the ability to define and solve problems as the most important skills a college graduate can possess when entering the workforce, and that these skills were significantly more important than technical skills such as mathematics, computer science, or statistics (Alles 2003). The ability to work in teams and to listen and learn independently was also rated significantly important to employers. One employer captured well the essential differences between professional or technical degree programs and liberal arts programs:

> …the liberal arts grad(uate) brings the wider perspective to the table. Teaching people to stretch, envision, and look beyond the moment is much harder for those with a purely technical background (p. 14).

These findings are confirmed in a study commissioned by the Association of American Colleges and Universities that found 89% of employers surveyed believed colleges should place more emphasis on the ability to effectively communicate orally and in writing, while 81% said the same about critical thinking and analytical reasoning skills. In addition, 75% said colleges should place more emphasis on the ability to analyze and solve complex problems (Hart Research Associates 2006).

As the global economy becomes increasingly centered on innovation and knowledge production especially in industries such as electronics, medicine, energy, logistics, and agriculture, SMLACs will have to navigate the multifaceted political economy described above while evaluating (and re-evaluating) their academic offerings to maintain the ability to attract and retain students (Deem 2001). This will necessarily compel many liberal arts institutions to consider adding new degree programs that demonstrate clear and direct linkages to current demands of the economy. It also will necessitate strengthening their rationale in defense of the core curriculum – the liberal arts tradition and mission – in order to justify its continued existence in a political and economic environment where it is superficially undervalued at one extreme, and deemed outright irrelevant at the other. SMLACs have continued to survive despite the challenges the higher education industry has faced. However, the internationalization response of higher education to the globalization of the world economy has brought scrutiny to the educational styles and missions of higher education institutions, and that scrutiny is felt most pointedly at small and medium sized colleges (Christ 2012). Those same colleges have an additional layer of scrutiny during times of economic stress as questions surrounding the value of a college degree, and the relevance of traditional

liberal arts programs like anthropology, geography, history, or literature are questioned against the backdrop of gainful employment concerns for college graduates.

In order to develop a framework that situates SMLACs in a strategic position within internationalization, it is important to develop a connection between liberal arts degrees and their utility in a global economy. To accomplish this it is necessary to better understand the origins and functions of, and the forces guiding, internationalization within higher education and the global economy as a whole. Therefore this research seeks to provide a more complete understanding of the trend toward internationalization in higher education and the impacts the trend is having on the U.S. higher education industry.

Summary

In order to address the core issues for SMLACs during the current period of internationalization, this research introduces a new measure of internationalization at higher education institutions that reflects the degree to which an institution is able to prepare students to contribute to the global economy. This measure emphasizes the liberal arts curriculum, allows an examination of the extent to which SMLACs are internationalizing, and allows comparison of SMLACs and LSIs. The measure also allows through comparative use an exploration of the role that place plays in fostering student learning and, when coupled with interviews of institutions' senior officials, some notion of the ways in which internationalization challenges the viability of SMLACs.

CHAPTER 2: LITERATURE REVIEW

The Internationalization of Higher Education in the Context of Globalization

The primary objective of this section is to situate the liberal arts and place small- and medium-sized liberal arts colleges into the economic development literature centered on the concept of globalization, which provides the context and motivation for institutions to internationalize. A second objective is to draw on the higher education literature to develop a compelling argument that substantiates what are largely anecdotal claims of the continuing relevance of the traditional liberal arts fields to the knowledge economy. Synthesizing these two literature reviews will provide a foundation for the main argument this project advances, namely that liberal arts institutions are instrumental to meeting the demands of the global knowledge-based economy and that students with a strong foundation in a liberal arts discipline are well positioned to participate in this evolving economy over the length of their career - not just upon graduation - a position that is opposite of the contemporary policy and rhetoric among many college administrators and government leaders (Fong 2010, Schneider 2008, Hersh 2009).

According to McMichael (1996), development has come to be the "master" concept of all the social sciences and is generally oriented towards the pursuit of improving material human conditions for all people. Defining the mode in which such end goals are achieved has emerged as the single biggest source of debate among members of the various social science disciplines, not to mention just what "people" and "material" and even "conditions" mean (Sklair 1995, Escobar 1994, Evans 1979). Included in material conditions, or at least a recent extension of this pursuit to improve social standards of living, has been the focus on learning in general, and education specifically (Lucas 1988, Krueger and Lindahl 2001, Mathur 1999). While much of

social and economic geography has devoted attention to the pursuit of improving material conditions, it is argued here that improving the quality and accessibility of education to all people around the globe will be the new foundation upon which national competitive advantage[7] will play out as colleges and universities around the world embrace internationalization.[8] The importance placed by the global economy on knowledge, information processing, innovation, and creativity calls for education to become the predominant supporting institution influencing the business environment (Gottlieb and Fogarty 2003, Mathur 1999). As Porter (1990) states:

> There is little doubt from our research that education and training are decisive in national competitive advantage. The nations we studied that invest the most heavily in education…had advantages in many industries that could be traced in part to human resources. What is more telling is that in every nation, those industries that were the most competitive were often those where specialized investment in education and training had been unusually great (p. 628).

In identifying this strong linkage between education and national economic advantage, Porter cites America's faltering education system as the single most important reason why its industries have failed to maintain the lead in innovation. Porter (1990, 628) points out that education and training provides "the single greatest long-term leverage point available to all levels of government in upgrading industry."

The globalization thesis, and development literature as a whole, provides a rich, complex context for understanding the motivations and current efforts of higher

[7] A competitive advantage is said to exist when a firm, industry, or nation acquires or develops an advantage in one or more factors of production that allows it to outcompete others in the market. Education is increasingly being emphasized as an essential factor of production as the global economy intensifies its demand for knowledge and innovation. See Cappelin (2007); Krueger & Lindahl (2001); Porter (1990).

[8] President Obama's goal of having the highest percentage of students graduating from college by 2020 is a direct attempt to help America "out-compete" other countries around the world. Similar goals have been set by philanthropic organizations such as Lumina Foundation and The Bill and Melinda Gates Foundations to increase the percentage of Americans with high quality degrees and credentials.

education institutions to internationalize. Yet, the concept of globalization itself has sparked significant debate surrounding its very nature and definition (Knight 2004, McCabe 2001, Biles and Lindley 2009). Questions also surround whether current global trends are unique on their own, or if they are current manifestations of a globalization project that began during earlier historical periods. Hirst and Thompson (2002) argue that current globalization trends are not nearly as impressive, in terms of international trade, as during the period 1850-1914. Conversely, Friedman (2005) and Ohmae (1995) interpret the events of the 1980's and 1990's as ushering in a period of globalization unseen in human history that is transforming the globe into a borderless world, so much so that they believe this period of globalization marks the end of the nation-state paradigm. Globalization powers this era as industrialization did the nineteenth century. This view is represented by Martin and Schumann (2007, 216) who define globalization as "the unfettering of world-market forces and the removal of economic power from the state". This philosophy has led many political and education leaders to approach higher education as if 'people live in an economy and not a society' (Feedback 2007, as quoted in Wadley 2008, 684).

Globalization is not a singular process, but consists of a number of complex, contested processes, flows, and networks of words and ideas, knowledge, and finance that operate on multiple scales - each having different outcomes (Giddens 1996, Jessop 1999, Ritzer 2003). In addition, a clear distinction is made in differentiating globalization from internationalization (Knight 2004). Globalization has proven difficult to define (Yeung 2002) and considered a 'chaotic' concept (Jessop 1999). Therefore, and for the purposes of this research, a working definition will be adopted whereby *globalization* is defined as

"the flow of technology, economy, knowledge, people, values, [and] ideas . . . across borders". Globalization affects each country in a different way due to a nation's individual history, traditions, culture and priorities (Knight and deWit 1997, 6). On the other hand, the *internationalization* of higher education has been defined as the "process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education" (Knight 2003, 3). Distinguishing these two concepts is important because it separates the activities that institutions engage in (internationalization) from the broader global social, cultural, technological, and economic forces at work in the world today that gives rise to contemporary institutional internationalization. In order to understand the internationalization of higher education, it is important to understanding the globalization forces propelling this trend, and how internationalization of higher education works to perpetuate globalization.

Perhaps more important than identifying a suitable definition for globalization or internationalization is understanding the discourse that has come to surround the globalization debate and often serves as the basis for decision making in virtually all aspects of higher education (American Council on Education 2011b, Skinner 2008). Interpretations of globalization play a role in what academic programs are offered or eliminated. They guide students (usually on the advice of parents) as to what college or major to choose, and whether to participate in a study abroad experience (Biles and Lindley 2009). They influence college administrators when pursuing collaboration programs with foreign institutions or nations. They also have profound impacts on college professors, many of whom are engaged in the globalization debate, and who make decisions that affect student learning through the courses they teach.

The Flat-Earth/Strong Globalization "Radicals"

Scholarly debate on the nature of globalization has evolved into two main perspectives: strong globalization and weak globalization (Weiss 1997). Strong globalization describes a process of increasing international interconnectedness that in its ultimate final form reaches equilibrium across geographic space in virtually all aspects of economic, political, social and cultural life (Held, et al. 1999). Such integration ultimately leads to the insignificance of national borders and national governments as well as social and cultural differences – the 'end of geography' (Biles and Lindley 2009). This view sees the current state of global affairs as consisting of an increasingly declining relevance of the nation-state, and more specifically, the declining ability of governments to have control over economic activity and even cultural change within their national territory (Ohmae 1995). Terms like "flat earth" or "borderless society" have been deployed as metaphors that underscore the argument that the events over roughly the past 20 years, particularly since the fall of the Berlin Wall in November of 1989, have accelerated global capitalist development to every end of the planet (Friedman 2005). In response, national governments have made attempts to somehow achieve local control over the forces at work on a global scale – efforts that are argued to be ineffective in the mid- to long range (Friedman 2005). The borderless society premise presents an irony in that the forces that gave rise to contemporary globalization trends were unleashed by the unbridled nationalistic spirit that started with the fall of the Berlin wall, and fueled by the subsequent break-up of the Soviet Union. These forces that ultimately led to the creation or reshaping of the economic and political organization of several dozen nation-states, it

is argued, is also driving the move toward a world without borders, or at least a world where borders have little impact on global capital and cultural heterogeneity.

For Ohmae, the process of globalization is being driven by irreversible changes in technology, especially information technology, and the impacts they are having on business processes and consumers around the globe. These changes have resulted in nation-states being increasingly vulnerable to economic choices made elsewhere by people and institutions beyond their control. For this perspective, it is not simply enough to describe globalization as the current stage in the history of internationalization, but rather globalization as an entirely different phenomenon from all prior forms of internationalization. As Ohmae (1995, vii) puts it:

> Indeed, so powerful are these effects that, once the genie of global information flow really gets out of the bottle – and it is certainly out of the bottle now – there can be no turning back. Against this kind of current, no traditional strategy, no familiar line of policy, and no entrenched form of organization can stand untouched or unchanged.

In summarizing the "radical" viewpoint of strong globalization articulated by Ohmae and Friedman, Giddens (1999) notes that current global finance and capital flow has no parallel in earlier economic times, and may ultimately lead to an "end of history" or at least an end to economic history.

Indeed, if what the world is witnessing were strong globalization, much of the justifications for internationalizing higher education are based on empty premises. A truly borderless society would be one where the value of travel and tourism would decline. It would necessarily be a time when cultural differences would not be so great as to require cultural study or immersion experiences such as language acquisition or study abroad. Partnerships with overseas institutions would bring little to no additional value

added than with a domestic institution. However, it can be argued that much of the Western world is only beginning to learn the extent of its cultural differences with China, India, and most of the Arab world. It is because these social, economic, and cultural differences continue to persist, and are even increasing, that higher education institutions continue to emphasize internationalization programs.

The Weak Globalization "Skeptics"

In contrast to the strong globalization thesis, "weak" globalization is used to describe the phenomena of increasing international organization that gives rise to a resurgence of the nation-state (Hirst and Thompson 2002, Woolf 2002). Weak globalization encompasses the ways that increased global interconnectedness also reinforces the role nation-states have in creating wealth and shaping their national society. This alternative perspective on globalization reveals how other observers of the very same "globalizing" forces argue that current trends in internationalization are not substantially different from previous historical periods. Rosenberg (2005, 2001) contends that the historical movement known as globalization has already passed. In fact, some observers claim that late 20th/early 21st century globalization is not nearly as impressive, in terms of international trade, as during the period 1850-1914 (Hirst and Thompson 2002, Winder 2006). Further, globalization is seen not as a singular process, but consisting of a number of processes that each have different results operating on different scales (Jessop 1999, Ritzer 2003). Weiss (1997) identifies three main areas in which globalization operates: economic, political, and cultural-ideological spheres. The economic sphere encompasses the activities of transnational corporations (TNC's), the political sphere represents a transnational capitalist class, and the transnational culture-

ideology sphere is embodied in consumerism (Sklair 1995). Maskell (1996) concludes that despite the growing influence of transnational corporations on the formation of global markets leading to global, convergent development, the importance of the local territorial settings of firms remains of paramount significance for their long-term competitiveness.

Discussion and Critique of Globalization Perspectives

Much of the debate over globalization emerges from differing understandings and beliefs over two main aspects of globalization. The first is the degree to which the processes at work, encompassed in the term globalization, can continue without limits. The second is the degree to which globalizing forces overpower all other forces at any time and at any scale, including the will of national governments, the global resource base, and the environment. Among the many skeptics to this latter notion are Hirst and Thompson (1999) who consider globalization a myth and point to North America, Europe and East Asia as three major blocs where national governments still hold substantial political and economic power. Weiss (1997) refutes the myth of the powerless state by citing examples where strong states – countries with firm domestic socio-economic control – are often responsible for changes attributed to globalization.

Despite Rosenberg's critical analysis of Giddens' (1990) theoretical underpinnings in *Consequences of Modernity,* it is Giddens (1999) who points out that what we are experiencing is not properly understood by either globalization adherents or their skeptics. Within globalization theory, reconciliation needs to be made between purely economic explanations of globalization and the sociological implications of the same globalizing forces (Yeung 2002). Giddens (1990) defines globalization as "the

intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa" (p. 64). In contrast, Ohmae, and to a lesser extent Friedman, focus entirely on the economic aspects of globalization, with little or no attention to the role of social or cultural in either cause or effect of globalization.

If the "strong" globalization accounts offered by Friedman and Ohmae are correct - that the economic forces at work in the 20th and early 21st centuries are resulting in a weakening of the role of the nation-state and the meaningfulness of managing a national economy - a corresponding discussion is necessary to evaluate the future of the global capitalist system driving the new era. Globalization is a modern manifestation of global capitalism, and as Norton and Warf (2012) point out, the rise of capitalism in Western Europe in the 16th century preceded the rise of the nation-state and that there is little correlation between the two historical events. Because of capitalism's historical precedence, the nation-state was not a necessary condition for capitalism nor was capitalism responsible for the rise of the nation-state. Therefore, a perspective that argues that globalization is a process that will bring about the 'end of the nation state' must necessarily provide a conceptual framework for the operation of global capital in a "borderless" society, especially if the elimination of national borders makes it more difficult for capital to preserve the necessary uneven development (Harvey 2007).

Much of the observed evidence presented by proponents of strong globalization is attributed to the drive of capitalist enterprises seeking higher profits primarily through lower wages, especially for products that face what Storper and Walker (1989) term weak competition (i.e. price competitive/labor intensive industries). Many factors are cited as

to why the contemporary experience of globalization. Friedman's example of Mexican religious statuary formerly produced in low-wage Mexico now being imported from China is used to argue for what he calls 'globalization', but is actually a new phase in the outsourcing of manufacturing jobs to regions with the lowest labor costs, especially when the need for skilled labor is low (Sit and Liu 2000). This raises a number of questions regarding the role China plays in the current global economy to ensure that what is being labeled globalization is not simply being confused by the scale effect of the impact of economic integration of approximately 1/6 of the world's population into capitalism. China's economic expansion raises a number of questions with regards to distinguishing between a new era of globalization and a more traditional, yet significant, capitalist territorial influence. These might include:

- What would have been the impact if China had remained a closed society in the Maoist sense thereby prohibiting capitalist enterprise as we have seen recently?
- Given with the opening of the Chinese economy, would it have the same impact on the global economy without the advent of internet technologies or low transportation costs?
- Did the fall of the Berlin Wall (Friedman's first earth "flattener") unleash pent up free market aspirations or did it provide new territories for global capitalism to recreate the uneven development necessary for its survival, the scale of which has been confused with globalization?
- To what extent is China's rise explained by the geopolitical void created by the fall of the Soviet Union?

The strong globalization argument fails to address the future of the capitalist system that is driving this new, unique form of globalization. The arrival of Walmart in rural Appalachian towns in the eastern United States – complete with shelves stocked with goods largely made in China – is not significant evidence that Appalachia has finally been integrated into the global economy (Brunn 2006). It may simply reflect a new era in retailing that exploits a mega-scale, "big box" approach to maximize economies of scale

and transportation logistics in an era of changing global trade and relatively low cost energy. Ohmae (1995), in arguing the growing irrelevance of the nation-state, cites as evidence that the per capita income in the Shenzhen region of China surrounding Hong Kong is more than 10 times the overall average in China, and in so doing fails to address the social and economic needs of the remainder of China in the presence of an empowered, functional national government. Such arguments do not sufficiently demonstrate the decline of national governments as economic agents, and they outright fail to recognize the broader roles of governments in social welfare (re)distribution, social control, and in many cases cultural safeguards that work to preserve national identity. In fact, the continued absence of economic integration of regions like Appalachia provide for a continued role of national government in ensuring social welfare and incentivizing economic development in a region that consistently lags behind the rest of the country.

In attempting to effectively and convincingly portray strong globalization as a metanarrative or an "end of history process", proponents have as yet failed to explain what will replace the capitalist imperative of profit through the constant search for new markets and lower cost factors of production – especially labor since it is this imperative that is driving contemporary globalization through the actions of transnational corporations. In a globalized 'flat world', the opportunities to exploit regions of the world with lower cost labor or resources will be eliminated. To say the world is now "flat" is at least premature as a large portion of the planet is still not participating in the global economy, and opportunities to do so seem unlikely in the near future given substantial political and social barriers present in a number of countries (Hirst and Thompson 1999). Urbanization, a distinct product of industrialization and economic

growth, as well as a proxy measure of the same, has only recently passed the 50% mark on a global scale (United Nations 2012). Ohmae's purely economic perspective of globalization ignores the important fundamental assumptions that such global economic expansion rests upon – energy, resources, and the environment – as well as downplaying the ability of national policy to mitigate globalization's impact. Indeed, globalization has brought new regional and national economies into global trade. However, the strong globalization arguments fail to address the increased demand for energy such industry and transportation requires to power this new era of global trade. Nor does it account for the impacts of increased energy demand on global climate change and the environment in general (Giddens 1996) China's rise to the top of the global economic ranks was accompanied by a similar rise in its rankings as a global leader in CO_2 emissions, although the U.S. still emits more on a per capita basis[9]. Even if strong globalization is indeed occurring, such resource and environmental limits to globalization are not addressed sufficiently to make 'borderless world' claims conclusive (Rosenberg 2005).

Reconciling the "Radical" and "Skeptical" Viewpoints

Grounds for reconciliation can be found in a few areas where the two globalization camps agree. Clearly, all commentators on the topic of globalization agree that the role of national governments is being forced to change in response to changing economic and social forces around the world. Both camps are likely to agree on the acceleration of space-time compression as a result of the rapid advances made in

[9] International Energy Statistics, Energy Information Agency, U.S. Department of Energy accessed at http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=90&pid=44&aid=8 on July 21, 2012.

information technology.[10] The increases in speed and intensity of communications, combined with the dissolution of much of the centrally-planned governments of the Cold War have removed substantial barriers to capitalist expansion and democratic self-government. Another area of likely agreement is found in the international nature of capitalist social relations that drive the process of uneven development across all areas of the planet, especially to the newly opened economies of Eastern Europe, Russia, India and China (Giddens 1999) an area that will increase the value of global competencies among labor.

Ultimately, however, reconciliation of the main perspectives of globalization requires a revised theoretical perspective that properly characterizes the role of geographic scale. Two key contributions provide a basis for improving the theoretical conceptualization of globalization with respect to scale offered to date. The first is the concept of scalar "switchability" presented by (Yeung 2002). This switchability, according to Yeung, is a necessary precondition for globalization, but not necessarily causation. Switchability is defined by Yeung as "the ease in which particular material processes and social practices can be constituted or reconstituted in relation to different configurations of geographic scale" (p. 291). Yeung offers the example of industrialization in England occurring in a specific, limited territory, but its impact on technological change and political strength ultimately led to the globalization of industry. Scalar switchability occurs when the scale at which economic processes or social practices operate 'can be (re)constituted, (re)structured, and (re)combined through – not by – various globalization processes such as investment flow and cultural diffusion' (p.

[10] Massey (2005) points out the irony that what has in fact happened is that it is time that is being reduced, and what is being expanded is space in the form of distance. Massey's conceptualization of space has space and time mutually implicated, making it impossible for time to 'annihilate' space.

291). From this perspective arises the notion of global localization or 'glocalization' (Swyngedouw 1997) or MacLeod and Goodwin's discussion of changing urban and regional governance in an 'ever harsher climate of globalization' (MacLeod and Goodwin 1999, 12).

Kelly and Olds (1999) describe the role of geography in globalization as a relativization of scale where global processes are not analyzed for how they affect another specific scale (e.g. how the global impacts national policy), but rather global processes are seen to have an impact on individuals and institutions at all scales, and the consequences of those impacts in turn have further impacts on other scales. Giddens (1996) distinguishes the process of globalization as not just an 'out there' phenomenon of large world systems, but also an 'in here' phenomenon that has clear impacts on local, everyday life, which itself is impacted by processes at a local, regional and national level, all of which are impacted by the same global phenomenon. Giddens and others (Hirst and Thompson 1999, Mittleman 1999) use global climate change as an example of one such process whose causes and effects operate through a complex interaction with nature and human agency at all scales. The increased complexity in understanding the scale at which global phenomenon operates creates a renewed importance for geography through the need to understand spatial processes across a wide range of scales.

Globalization and Challenges to Higher Education

The impact of the same forces that drive the current trends encompassed by the term "globalization" are having profound effects on higher education not just in the United States, but indeed around the world – changing not just how students are to learn and what they learn (Clegg, Hudson and Steel 2003), but also where they learn. Altbach

(2005) claims that globalization is responsible for the contemporary pressures facing higher education institutions. These pressures include the growth of the private (for-profit) sector, the mass demand for higher education (through distance education leveraged by internet technologies, including "MOOC's"[11]), and the manner in which research and development funds are distributed by national governments and multinational corporations.

Globalization has also emerged as a substantial theme within the regional economic development literature (Dickens 2007, Hess and Yeung 2006, Coe, et al. 2004, Gereffi 1994). From the standpoint of a region, the literature explores strategies that regions employ to "hold down" the global – efforts to improve a region's ability to continue to attract and retain producing firms and their investments that benefit the local economy through employment and tax revenue (Phelps 2007, Glassman 2007) Globalization has brought expanded opportunities for producing firms to exploit new labor forces and new sources of materials, requiring firms to seize on advances in communications and logistics in order to efficiently manage evolving production opportunities across increasing geographic space. From the viewpoint of the firm, the focus has been on organizational structures that manage the production and distribution process in a global production networks. The literature on global production networks investigates the production of goods in a constellation of producing regions around the globe connected through the production organization of multinational or transnational corporations (Coe, et al. 2004). In each producing region and in the centers that oversee

[11] An MOOC is a massive online open course that is usually based on an actual course taken for credit in the traditional format. Students in such networked learning environments do not earn credit nor pay tuition, and course requirements may differ from what is required in a traditional delivery course. In some cases, students who wish to earn credit will need to pay a fee.

overall production, organization, knowledge, information, and learning processes - expressed in the form of improving technology and human capital - play an increasingly pivotal role and often present a determining factor of competitive advantage between firms, regions and national economies (Glasmeier 1999). Similarly, the presence and operation of globalizing forces in higher education are observable, and have been at work for many years. Some meaningful parallels can be made to the globalization of the economy, global production networks, and internationalization of higher education[12]. For example, the Bologna process launched in Europe as a way to standardize curriculum and program outcomes can be seen as a direct outgrowth of the motivations behind a single European market (Woolf 2002), with the added benefit of bringing convergence between U.S. and Europe by adopting many aspects of the American higher education system. Such standardization is referenced by Friedman (2005) as one of the ten world "flatteners", a standardization that is an essential element of global production networks.

Cross-border Education

What we indeed may be witnessing in the internationalization of higher education is the transition from nationally-oriented institutions to globally-oriented institutions, particularly among the world's elite institutions which are poised to benefit global capital, while the former serve national, domestic development interests. Altbach and Knight (2007) document the proliferation of cross-border education endeavors. They stress that this current trend of mostly U.S. and European institutions opening up branch campuses is best characterized as a new wave of internationalization within higher education, the tempo and fervor with which such relationships are established is

[12] In a global production network perspective, education is one of the strategies to enhance generation of value. It is closely connected to "regional assets" in this context.

suggestive of the same flurry described by strong globalization theorists. Nevertheless, such opening of branch campuses does not constitute globalization, but mirrors more closely the branch plant strategy of U.S. and Japanese firms that is associated with the period of deindustrialization in the United States that began in the 1960's (Florida 1996, Majek and Hayter 2008). The trends in study abroad and international students also have parallels in the development strategies of import substitution and export led industrialization where students are sent to universities overseas for some or all of the value-added stages (McCabe 2001, Urias and Yeakey 2009).

For-profit/Online Distance Education

Many of the strategies developed by higher education institutions are merely efforts to cope with the forces of globalization, while other strategies reflect efforts to capitalize on rapid advances in information and communications technology (ICT) and thrive, particularly among private, for-profit institutions. For example, Laureate Education, a U.S. based for-profit institution, now has 53 campuses spanning 4 continents and 20 countries, most of which have opened in the last 5 years[13]. Capella University, also for-profit, offers courses and programs in a completely on-line format to over 37,000 students from all 50 U.S. states and 53 countries[14]. The University of Phoenix (for-profit) was launched in 1976 and has grown to become the largest university based on enrollment through a hybrid approach of campus-based and online programs. Institutions employing the advantages of online distance education market themselves primarily to the adult learner seeking to complete their degree course work or to pursue a degree entirely online. The role of advanced ICT gave rise to online learning, but the rapid

[13] Laureate Education, Inc. is a Baltimore, MD based for-profit institution that claims former U.S. President Bill Clinton as its honorary chancellor.
[14] Capella University website: http://www.capella.edu.

growth in enrollment at these institutions is also attributable to the increased need for adults to upgrade their education and skills in an increasingly demanding and competitive global economy – due in whole or part to the deindustrialization in the U.S. that globalization has facilitated. These institutions have also benefited from being a viable option to workers in the U.S. and abroad at a time when a global recession has created high levels of unemployment, which historically leads to increases in enrollments as workers use education as a means to start a new career, or improve their employment chances (Betts and McFarland 1995, Pennington, McGinty and Williams 2002).

Central to the success of the for-profit institutions is their 'uncritical acceptance' of emerging internet technologies to replace traditional classroom-based instruction in the name of student flexibility[15]. Such success has forced traditional higher education institutions to adopt similar approaches, albeit to a much lesser extent, in order to compete for students and contain educational costs. This uneven acceptance of "e-learning" as a delivery mechanism and pedagogical approach is in large part due to concerns of quality of instruction in a purely online format, so much so that many U.S. institutions often do not accept transfer course work or degree programs completed online from for-profit institutions[16]. As the for-profit sector is able to develop articulation agreements with traditional institutions, and gain accreditation from regional accrediting bodies, public and non-profit institutions will be challenged in their response to this

[15] For a review of studies of effectiveness of online and blended (online and face-to-face) learning programs compared to traditional face-to-face only (offline) learning, see Means, et al., (2009).

[16] Most public and private-not-for-profit institutions place a restriction on the number of credit hours a student may take, or transfer in, from another institution. Regardless of how the course was delivered, many institutions require that the institution be accredited by a regional accrediting body before they will accept any credits. Many for-profit institutions only have accreditation from a national body which is often viewed as less rigorous than regional accreditation.

rapidly growing phenomenon, further challenging strategies academics and universities have employed to resist such changes (Clegg, Hudson and Steel 2003).

Campus-based International Enrichment

The forces behind globalization affecting higher education have led to a great expansion in accessibility to higher education. The success of the for-profit sector of U.S. higher education industry is based on their ability to capitalize on education as a private good. This is juxtaposed against institutions that largely are charged with providing education as a public responsibility of the state. State-supported public institutions have responded to globalizing forces by developing strategies that promote internationalization at all levels of the institution: study abroad for resident students and recruitment of international students, especially in the sciences, technology, engineering, and math (STEM) fields for which the global economy has created a high demand. Public institutions have also sought to expand cross-cultural experiences in the curriculum and student life by emphasizing foreign language skills and international content and perspectives. Furthermore, institutions have sought partnerships with individuals and institutions in other countries as a way to enrich the educational curriculum, and also to expand the types and quality of research being done through programs such as visiting scholars.

One of the challenges presented by the internationalization of higher education is that of standardization generally, but also of quality and equivalency in educational outcomes across different institutional types, delivery methods, and geographic locations. The challenges brought on by globalization are more acute at small, private liberal arts colleges. The imperative to change and adapt to the challenges of the global economy is

less obvious but just as important at institutions that market themselves to students from regional markets rather than at the national or international level. With degree program offerings that are largely or entirely composed of the traditional liberal arts fields, these institutions face substantial pressures to prove their relevance in a political and economic environment that emphasizes programs that enable students to enter a globally competitive workforce. The irony is that these institutions are entirely focused on providing the type of education that many argue is ideal in a globalizing world economy (Friedman 2005, 316, Florida 2002b, 2006). Whereas business and STEM fields provide education in directly marketable fields in the economy, liberal arts degrees provide a broader set of critical thinking skills that enable students to become better learners and thinkers in a broader set of cultural and economic environments.

Community Colleges as Policy Response to Reviving American Competitiveness

Traditional 4-year liberal arts institutions face the pressures of competition from their larger public 4-year sister institutions; both face competitive pressures from the new model established by the for-profit institutions. All three sectors have to contend with the country's community colleges, who themselves are seizing upon a niche interpretation of globalization and have the backing of the federal and state governments at a time when it is a political necessity to cater policies to constituents who are unemployed. Indeed, to keep the U.S. competitive among OECD members, the Obama administration is joined by a host of philanthropic organizations in setting an aggressive goal of achieving 60% of Americans with a 'quality' degree, and has largely focused on the U.S. community college system to achieve 5 million more degrees by 2020 (Jaschik 2009). This is perhaps the biggest challenge globalization presents to higher education. The U.S. higher

education system is one of the few remaining industry sectors in which a high level of hegemony is exhibited around the world, and yet it is being appropriated by political interests to serve a short-term goal of re-establishing American industrial and economic might and as an engine to reduce unemployment rates by providing opportunities to gain an education appropriate for the global economy.

Challenges to U.S. Education Hegemony

While most top-tier institutions are found in the U.S. (Liu and Cheng 2005), others exist around the world and many other countries are in the process of promoting institutions that soon will have world class status – especially China (Friedman 2005) and Singapore (Olds 2007). Further, many institutions around the world have support from institutions in the U.S., Canada, Britain, Germany, France and Australia through a number of partnerships. These partnerships act much like technology transfers in industry that have allowed countries to improve their industrial capacity and competitiveness, often by emulating the American model of higher education. Just as the U.S. dominated the steel and auto industries in the mid-20th century, positions recently ceded to Japan (Dickens 2007), the rise of higher education in advanced industrial economies is likely to bring challenges to the U.S. dominance in higher education.

Summary and Reflections on Globalization

The purpose of this research is not to reconcile the differing views on globalization. It also does not take either position as an empirical given. The term 'contemporary global economy' is used here to refer to realities of the global economy in the first decade of the 21st century regardless of whether its globalized nature is unique or outstanding with regard to the history of capitalist economies. Neither does this research

nor the term ‘contemporary global economy’ assume an ‘end of history’ outcome is inevitable and impervious to efforts of national (or even supranational) governmental efforts. This research does assume, however, that actors within higher education and political leaders with the ability to impact higher education policy often do have interpretations on the nature of globalization and these are in turn affecting the decisions they make either in support of globalization or to restrict the impacts of globalization.

The debate on globalization demonstrates a similarity to the global climate change debate that emerged as a serious political and intellectual concern at roughly the same time as globalization. This is no coincidence since the consumption of vast amounts of relatively cheap sources of energy and resources, mainly fossil fuels, correlates to the rise of the contemporary global economy and the closer integration of national economies based in large part on low cost global transportation and supporting logistics (Markusen 1996). Yet the greatest parallels in these two issues is the degree to which empirical observations in each phenomenon drive the zeal in the debate – such as when a powerful hurricane, extreme heat/drought, or extreme flooding are cited as evidence of climate change. Examples include, and Friedman is most guilty of this, citing the presence of sushi restaurants in NW Arkansas, Google being available in 116 languages, or being able to watch daily news from Cairo in Arabic anywhere in the world – all of which are not sufficient evidence of the strong forces of global economic and social homogenization. Both climate change and globalization can be better theorized if such anecdotal empirical evidence is replaced by research into the deeper, complex nature of the forces at work and a richer epistemology of the scales at which they operate and interact.

Within the literature on higher education internationalization, a key theoretical construct is overlooked: globalization as an "end of history" meta-narrative (Hodgson 1999). The result, proponents of strong globalization argue, is a world where globalization forces successfully bring about a socio-economic system with such extensive integration that the evolution of the nation-state paradigm has reached its final form – a theoretical 'one world order' – and regional social, political and economic disparities are reduced or eliminated. U.S. higher education has played an important role as a globalizing force – working in many areas to bring about social, political, and economic reform around the globe. Indeed, students, faculty, and staff engage in international research and outreach through opportunities provided by American institutions that often address critical issues of local, regional, national or global consequence – such as disease, food security, economic development, and climate change – while at the same time providing rich research and learning opportunities often through partnerships with foreign governments, non-governmental organizations, or other institutions. Yet the degree to which U.S. higher education is complicit in a strong or weak globalization project and whether these activities in the international arena are working to hasten such outcomes has been largely ignored in the literature (Biles and Lindley 2009).

However the current trends in higher education are characterized, they are having profound effects on institutions and these effects have differing impacts and responses depending on institutional control and mission (Childress 2009). The contemporary global economy has brought with it a realization that this new economy is a knowledge economy where information is a key commodity and a well-educated workforce is

necessary to process both new and old information in new and creative ways. This realization has caused political and economic leaders to place greater reliance upon higher education to provide graduates who can compete and succeed in this new economic environment. In response, most U.S. institutions have pursued internationalization strategies and do so as a way to better prepare students in their careers in an increasingly global economy and as a way to market themselves to prospective students. Internationalization also opens new sources of revenue for the institution through international students who are estimated to bring $13 billion into the U.S. annually (Institute on International Education 2011). Such internationalization strategies contribute to local and state economic development and competitiveness – an important justification to local and state policymakers as an argument for increased funding (Childress 2009).

The Learning Economy

The term learning economy is used here to encompass both a body of scholarly literature as well as the more colloquial use of the term 'knowledge economy'. In the contemporary global economy, knowledge is the most important resource, and learning is the most important process (Lundvall 2004). The main theory of the learning economy is that economic growth and development are dependent on a coherent system of innovation at the urban, regional or national level and that such systems are centered on the ability to develop knowledge (often patentable knowledge) and benefit from continuous learning (Lundvall and Johnson 1994, Lundvall 2004). This section seeks to explore the association between the learning economy and globalization, and subsequently to demonstrate higher education's role within the learning economy.

Piore and Sabel (1984) argue that continuous innovation is a necessary condition for sustained industrial growth, and (Lundvall 2004, 3) argues that productivity and innovation are dependent upon the "capacity of people, organizations, networks, and regions to learn" – that is learning for the purposes of creating new knowledge, improving the use of that knowledge, and learning to make effective use of technologies. Lundvall emphasizes that "learning is predominately an interactive and, therefore, a socially embedded process which cannot be understood without taking into consideration its institutional and cultural context" (Lundvall 1992, 1). The concept of the learning economy is a conceptual framework useful for understanding how the processes of industrial innovation and regional integration operate in the contemporary global economy (Gregerson and Johnson 1997).

On The Two Types of Knowledge

Knowledge as used in the context of the learning economy is built on the concepts of tacit and codified knowledge and how these work in tandem in research, development and production in a geographic area to form the economic base of a region (Asheim 1996). Explicit (codified) knowledge consists of information and knowledge that can be directly learned through reading, studying, and testing and is especially suited to formal learning environments such as secondary and postsecondary education. Codified knowledge can be committed to any number of storage devices for later retrieval or dissemination (e.g. books, audio and video recordings, CD-ROM/DVD, computer hard drives, etc.). In fact, with the availability of digitizing codified knowledge can be made available anytime, anywhere[17], the cost of which is determined by a price mechanism in

[17] A good example is the vast information made available via the internet especially as indexed by search engines such as Google. Particularly noteworthy is the Google Books project where Google has worked

the market. Examples of this type of knowledge include things like recipes for bread, reference books, instruction manuals, textbooks, software (e.g. Microsoft Office), and a vast array of similar items.

Tacit knowledge complements codified knowledge but has different sources and applications. One might use codified knowledge in the form of a manual to assemble a bicycle for a child, but must rely strictly on tacit knowledge to help that child learn how to ride. A unique quality of tacit knowledge is that it is difficult to codify. The most effective means of transferring tacit knowledge is through personal contact, regular interaction, and trust (Bathelt, Malmberg and Maskell 2002). As such, tacit knowledge is most effectively transferred only in particular contexts where learning is an interactive, socially embedded process (Goffin and Koners 2011). Examples of these environments include industries where apprentices work with a craftsman, or a college where students are teacher-mentors.

Both tacit and codified knowledge share several important qualities. The first is that they can be developed. Both are created and improved through various activities including research and experimentation. These concepts form the basis of the learning economy. This form of economy does not presuppose a particular economic base (e.g. manufacturing). It doesn't even presuppose a particular socio-economic formation.

Theoretical Models for the Creation and Spreading of Knowledge and Innovation

Two important models exist in order to understand the nature of learning in economic development in industries, regions, and nations. The first comes from Gregerson and Johnson's (1997) national system of innovation. Their model provides an

with several major libraries to provide catalog indexing and content snippets to make a large volume of books available to readers around the world. The project has been challenged by authors and publishers who claim copyright infringement.

understanding of how innovative performance draws on the production of direct and indirect learning (tacit and codified knowledge). Such learning is produced by a constellation of factors that interact and include a knowledge infrastructure, a production structure, policies, institutional set-up and consumer demand structure. By knowledge infrastructure they refer to a set of institutions that include universities, research facilities, local schools, etc. Production structure for this purpose involves the existing or desired economic activities for the area based on current and future economic growth. Policies includes all applicable local, state and federal laws and ordinances as well other contractual agreements such as tax incentives, credits, labor agreements, etc. Institutional setup encompasses the broad range of economic and social institutions present in the area that support firms across various aspects of the production process as well as employees and residents. The final part is consumer demand in the form of public and private needs. According to Gregerson and Johnson (1997) the functional interaction of each of these components are essential to supporting the innovative capacity of a region.

Once knowledge is created, a key concern focuses on how it is then transmitted within a region to foster economic growth and further innovation. A long lineage of economic research informs this topic, beginning with Marshall's ([1890] 1961) work on industrial districts and the role of agglomeration of small and medium sized firms in a region. Marshall's findings centered on agglomeration effects in the form of external economies (efficiencies that are outside the firm, but internal to a region) that benefit similar and related firms, including similar supplier firms and a pooled labor force. Marshall also observed that tacit knowledge spreads among firms, describing this phenomenon as an industrial "atmosphere", noting that industrial secrets are "in the air".

Amin and Thrift (1994) use the concept of 'institutional thickness' to describe the level of development of institutions that support learning and innovation, which is a necessary condition for competing in a global economy (Asheim 1996).

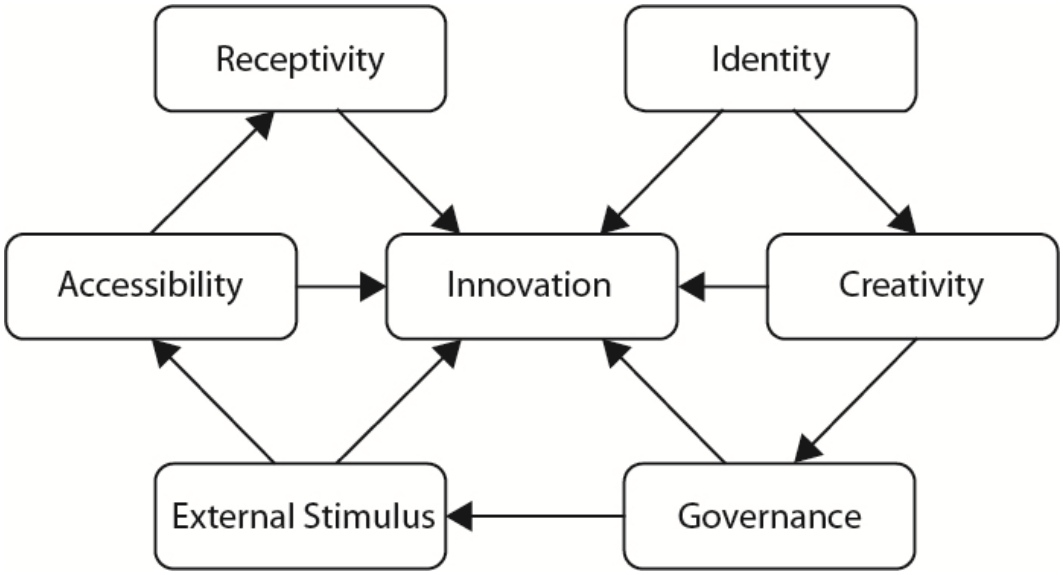
Marshall's concept of industrial secrets being 'in the atmosphere' has since been further articulated by Bathelt, Malmberg and Maskell (2002) in their treatment of "buzz and pipelines" as being critical dimensions for knowledge creation. Briefly stated, the "buzz" is an encompassing term of the various forms of formal and informal "conversations" that occur among individuals within an area that allow for the transmission of tacit and explicit knowledge. This can include such venues as a workshop or meeting organized by the local chamber of commerce or rotary club. Pipelines refer to the transmission of knowledge to and from points outside the region. This can include formal and informal methods of learning from colleagues at a conference or from contacts at a supplier or consumer. In the case of "buzz", information is typically of the face to face variety, where transmission of information is shared through a variety of methods, but increasingly through the internet including the wide array of social media networks. Buzz and pipelines facilitate knowledge acquisition and help lower the cost of, and speed the development of, innovation.

Several subsequent refinements of Marshallian agglomeration economies have been offered by Arrow (1962) and Romer (1990) to envelope what Glaeser (et al., 1992) calls the 'MAR' spillover effects. This has frequently been contrasted with the work of Jacobs (1961) who felt that while agglomeration economies like those described by Marshall indeed exist, they were more effective and productive in urban areas where a high degree of industrial and economic diversity existed. Essentially this cross-breeding

between industries allowed for important external economies as different industries learned new ways of doing things from each other. This kind of "repurposing" is embodied in her popular quote "new ideas require old buildings" referring to creative industries moving into vacated industrial plants and warehouses in central cities.

Cappelin's (2007) model for territorial knowledge management provides a model for how produced knowledge is to be retained and circulated within a territory. The diagram below demonstrates the key elements Cappelin argues are important to the fostering of innovation.

Figure 2.1. Cappelin's (2007) System of Innovation



These two models from Gregerson and Johnson and Cappelin form the basis for developing a system of innovation that generates economically valuable knowledge and provides a mechanism for its circulation and retention within a regional or national economy that leads to endogenous economic growth.

On Forgetting

While often the role of learning and retaining of knowledge is the focus of the learning economy, Gregerson and Johnson (1997) also emphasize the importance of forgetting. This can manifest itself in many ways from simply forgetting a fact or task by a worker to layoffs or terminations of employment, retirements, closing of departments or product lines, or even plant or firm closings. Along with knowledge, forgetting also includes the dying off of habits and modes of thinking that become outmoded, inefficient or counterproductive especially those that pervade not just industries and firms, but other formal and informal institutions as well. For example, while only older members of society are familiar with the sending and receiving of letters, this form of communication has become slow and costly compared to other methods. Certainly the role of a printed and mailed letter retains a useful purpose in some cases. Those that choose to retain this form of communication based solely on nostalgia when other more efficient and cost effective methods such as email or "texting" are available stand to become obsolete. In this case "forgetting" the letter in exchange for other forms of more immediate communication is an example of innovation. To Schumpeter (1942) forgetting is 'creative destruction' that often allows for the new and innovative to replace what was destroyed. Forgetting informs this research by raising the prospect that as economic change occurs in the future, certain types of educational backgrounds lead to a greater propensity for adaptability and greater efficiency to respond to the new demands these economic changes require; and to what degree does a liberal arts background provide that long term adaptability.

Education, Innovation, and Economic Growth

A link exists between the levels of college completion and urban regional economic growth (Gottlieb and Fogarty 2003, Florida 2002b, Glaeser, et al. 1992). Similarly, the literature is rich in studies that make the link between university research, innovation, and economic growth (Anselin, Varga and Acs 1997, Audretsch and Feldman 1996). While some studies report mixed or inconclusive results, many real world examples of the link between firms and universities exist and can inform the nature of the relationship between university research and regional firm recruitment and retention practices. The first example was addressed at the outset regarding the role of knowledge and its creation to a learning economy. The second involves the nature of the social and economic relations within a region that are critical to fostering and sustaining economic growth. Here several important works offer guidance for the emergence of the learning economy in other contexts such as Maskell (1996) on Denmark, Casey (2006) on Australia and New Zealand, and Hudson (1999) on older industrial regions in Europe in the time of European integration.

The emergence of a regional identity also encourages another important quality discussed by Maskell (1996) – trust. Profit motivated firms located in an industrial region can both benefit and suffer from competition. An important lesson from successful learning economies is that when this competition is rooted in an environment of regional identity and trust relationships it fosters the mutual well-being of everyone involved. With much of the literature on the globalization of the economy emphasizing how the global is crystallizing the local (McMichael 1996), it is necessary to explore further the relationship between the local and the global in order to provide a rich

understanding of what a college campus can provide through a residential educational experience complete with global significance for participating in the contemporary global economy.

Place, Scale, and A 'Site Ontology' Framework

In order to reconcile perspectives on globalization and the learning economy and how liberal arts institutions are situated in these processes, a framework is needed that allows a place, such as a college campus or town, to be studied as a social institution that is both the product of complex social processes, as well as an active participant in the shaping of those processes. Such reconciliation can provide a new conceptual framework for the development of strategies to help SMLACs continue to preserve their unique communities and educational missions, providing students a rich educational experience that remains relevant in the contemporary global economy. To arrive at a workable framework the problem of scale must be addressed in a way that accommodates the complex scalar aspects of globalization and the local political economy embodied in the college campus and college town, and how the liberal arts is inherently embedded in the learning economy thereby connecting the global with the local. The concepts of space and place have been staples within the human geography literature whose richness was developed significantly by Tuan (1974, 1975, 1977) and more recently revived in Cresswell (2004). The concepts have received renewed and heightened attention in response to the "hype" afforded to the local by globalization theorists (Scholte 2000).

David Harvey's work provides a context in which to begin exploring the aspects of place and space in the broader urban geography literature and its inexorable relationship with globalization. As Harvey (1989b) explains, much of his career has been

devoted to understanding the nature in which urban areas operate. His analysis is heavily influenced by a Marxist critique of capitalism (Harvey 1989a). Harvey (1978) draws from Marx's work and spatializes it by developing his "circuits of capital" thesis. The first circuit is based in the production process itself, or the creation of surplus value based on inputs of production (land, labor, resources). The second circuit of capital stems from the surplus value of the production process that is invested in the built environment of cities as a way to realize further surplus value. The third circuit is investments in human capital and technology to further improve the profitability of the first and second circuits. Each of these circuits of capital has spatial implications for urban development, and each have launched different strands of urban research. For example, the building up of the built environment introduced by Molotch (1976) gave rise to the concept of urban 'growth machine' that was later expanded by Logan and Molotch (1987). The growth machine concept was centered on the idea that the apparatus of interlocking pro-growth associations and government and non-government agencies had a vested interest in intensifying the land use in an urban area as a key mechanism for driving local urban growth. This included alliances between landowners, developers, the construction (and hence banking) industries, as well as local government. One sees the work of Logan and Molotch persist even if not acknowledged, in the work of Cox (discussed below) on New Urban Politics that describes the nature of economic growth as it is contested in social and political arenas of a city.

Harvey (1989b) provides insights into this shift in his treatment of how urban governance shifted from managerialism to entrepreneurialism, where mayors and city leaders engage in competition for industry and cultural phenomena. This new

entrepreneurialism is also exemplified by the number of mayors, governors, and their delegations who visit foreign corporations and governments as ways to help negotiate their involvement through foreign direct investment in local branch plants, or "pull down" or "pin down" capital (Amin and Thrift 1994). This last point is developed further in discussing campus recruitment of foreign students.

Building off the national systems of cities literature (J. Marshall 1989), Sassen (1999, 2002) has contributed to the understanding the role of 'global cities' and how their role as nodes in the global system of cities relates to their role within the national context. Sassen's work both addresses the changing internal nature of global cities like New York and London, and how their increasingly international focus causes increasing differentiation from cities within the national context. She also points out how the financial, legal, accounting, advertising and management industries in these cities help establish them as command and control points in the global distribution of capital, so much so that this network of cities has become sufficiently integrated that events that impact one city in the network have equal and almost instantaneous impacts through the system. This field has proven successful in attracting a number of researchers to contribute to the understanding of global cities. For example, Derudder, et al. (2007) provide an analysis of airline passenger travel to provide an alternative method of ranking cities. What has emerged from such alternative ways of ranking cities is that, when compared to the traditional 'rank-size rule' method based on urban population size or density, researchers have, perhaps unwittingly, contributed to the concept posited by Castells (1996) that cities are now spaces of flows, not spaces of places.

Massey's contributions on place and scale (1991, 1993; 2004; 2005) serve as an entry point for considering the global impact of experiences and perceptions of place. Her work largely focuses on how place is affected by global economic forces at work and how they act upon and transform everyday life. One key theme is the changing spatial division of labor and its impact on places as capitalism expands across the globe. This transformation affects the economic and social lives of people in places in different ways. From this work, Massey (1999) stands as one of the premier thinkers on the role this transformation has had on women, particularly in relation to the changing nature of women in the division of labor as domestic roles in the home were reproduced in the workplace as a response to the economic crisis of the 1970's in the United States that compelled households to have two incomes to support the family.

While Massey's work often approaches place/space as being impacted from the top down (i.e. the relationship between the global and local is vertical), Cox (1995) approaches the issue from the bottom up in his focus on the local. Cox is often criticized for his poor and inaccurate treatment of scale, especially in his construction of the global scale (e.g. Jones 1998, Smith 2000). Defenders of Cox (e.g. Marston 2000, Jones 1998) have pointed out that this treatment of space is not concerned with the nature of the relationship between the local and the global; rather, it seeks to examine localities in the context of local economic development. In a sense, observations are fixed on a place and the investigation is on whatever processes may pass through it, be they local, state, national, or global. Cox is considered to be among the first to approach place 'without scale' (Marston, Jones and Woodward 2005).

A key contribution of Cox is the notion of "spaces of dependence" and "spaces of engagement" (Cox and Mair 1988). Cox introduced and developed these two concepts as a way of describing how places are constructed and altered over time. By "spaces of dependence", he refers to those social relations that allow people to derive meaning from where they live. This includes the formal and informal institutions of neighbors and neighborhood, schools, entertainment, shopping, etc. This is a formal application of the concept first introduced by Lefebvre (1991) in *Production of Space*, discussed in Merrifield (1993) and Gottdeiner (1994), that space (especially urban space) is socially constructed. One is reminded of a similar notion introduced by Marx: "It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness" (Marx 1859, 11). This emerges as the central theme of Lefebvre's work (Merrifield 1993). In "spaces of engagement" Cox refers to the arena in which spaces of dependence are forged. As Merrifield (1993) points out, space and place is a dialectic concept much like wave and particle are part of quantum physics.

In discussing the social production of space, Lefebrve (1991) introduces the related notions of "spaces of flows" and "spaces of places". In such a context, the spaces of flows represents the macro level or "global" forces in society, where spaces of places embody the constellation of micro- or local level practices of everyday life (Keil 2003). Castells (1996) argues that late capitalism is in fact transforming society from "spaces of places" to "spaces of flows", an argument often rejected by scholars like Massey and Cox who maintain the unique and important role place has and continues to have in contemporary global capitalism.

Having introduced this concept of spaces of flows transforming spaces of places, it is important here to theorize about the nature of place in the global capitalist paradigm. Massey (1999) points out that in pre-modern societies, it was possible to have "space" and "place" physically coincide since such places rarely if ever were impacted externally on a daily basis. Yet as such places and regions became involved in the emerging capitalist system, the nature of their livelihood became increasingly determined by forces from beyond, or 'out there' (Giddens 1990). This leads to the theoretical exercise of envisioning a continuum where at one extreme is a condition where the physical definition of a space and a place coincided 100% (rarely did this occur except in the medieval walled city). At the other extreme is a situation where place and space, at least in theory, do not coincide or even overlap. Ethnic Jews who reside outside Israel might be an example of this. This extreme would require a physical space to exist, while the people who derived meaning from that place existed elsewhere.

The conceptualization of the meaning of places being located in the global-local debate has led to significant attention being given to the concept of scale and its ontological or epistemological nature. The contemporary investigation of scale is said to begin with Taylor's seminal work in 1982, "A Materialist Framework of Political Geography". Taylor's primary goal was to re-establish the proper role of state authority in the discourse of globalization. Taylor's treatment of the global, national, and local levels has come to define research and theory of space, place and scale since its publication. Essentially, Taylor defines the world economy as "reality" adding that this is the scale that 'really matters'. As if the various scales operate in a vertical fashion, Taylor places the nation-state at the level of "ideology" emphasizing that the state is the

filter through which the world economy is mediated. Taylor puts the local at the bottom indicating that this is the scale of "experience", the result of the world economy filtered or mediated at the national level in how it defines and shapes daily experience.

While Taylor's work remains a hallmark work on scale and place since, much work has gone into examining the concept of scale itself. Duncan (1985) uses structuration theory (Giddens 1984) as a foundation for the conceptualization of scale as being structurated, a process Duncan calls "scalar structuration". Later, Amin (2002) explored the concept of scale as being relativised, or relative to the scale of processes acting within society. There are even conceptualizations of scale being linear (e.g. Friedman's "The World is Flat").

The nature of relationship between global and local embodied in the concept of scale remains contested although recent research has found agreement on the "creation and/or reconstruction of scale as a social relation" (Jessop 1999). Efforts to characterize scale as being structurated, vertical, linear, dialectic and relative have each been criticized for their shortcomings in theory and practice. A recent and fruitful approach to the issue of scale is that of Marston et al. (2005) in their envisioning of "human geography without scale". Their questioning begins with why scale has come to be viewed in the literature as ontologically given (i.e. that a phenomenon is assumed to exist or operate at a given level), rather than allowed to be discovered or determined as the result of epistemological endeavor or social process. While physical processes are more clearly defined on a cartographic scale, human geography lacks a clear operational scale from which to begin scientific enquiry. Given that scale is inherently hierarchical, they call for the elimination of the term from human geography (Collinge 2006)

Taylor (1999) has further contributed to the conceptualization of space and place in his attractively titled "*Space, Place, and Macy's*". Taylor reintroduces the duality of space and place first described by Tuan (1977), but casts the 'production of space' as being one of a tension between space and place, or more broadly, between social relations at the local level and broader global forces. This tension is represented by reference to the department store Macy's as symbolic of consumerism in general, among many other such signs, and exemplified in the annual holiday tradition of the Macy's Thanksgiving Day parade, a distinctly local event with significant global appeal and implications.

Relatively recent concepts that have come to inform the research on space, place, and scale is that of Actor Network Theory (ANT) and Massey's (Massey 1993) 'power geometries'. Actor network theory comes from the French sociology tradition, while power geometries is a term coined by Massey that represents the lineage of thought beginning with Marx in his "annihilation of space by time", a concept that was further conceptualized as "time-space convergence" by Hagerstrand (1975). ANT portrays actors as human and non-human agents operating in a network of social, economic and political relations.

> Firstly, although networks are forged for a whole variety of purposes, they are always a means upon acting *upon* space ... and it is the sets of associations which define and constitute spatial qualities. Space, although partly physical, is therefore wholly relational. Secondly, spaces are arranged so that certain types of action can be conducted. Thus, the action in actor-networks configures space. Thirdly, these actions, and the relations through which they are conducted, are `grounded'; they never shift registers or scales but remain firmly within networks. This last point has been well made by Latour who, in his general campaign against dualistic forms of thinking, suggests that we refrain from any shift in scale, between say the `global' and the `local'; rather, we should simply follow the networks wherever they may lead (Murdoch 1998, 361; emphasis in original).

Similarly, Massey (1993) describes power-geometries as the varying levels of impact "global" forces have on different actors in a network. It is from this line of theorizing that she places her feminist project by analyzing how such external forces such as capitalism affect men and women differently in different spaces and places.

Harvey (1989) has done a great service to the field of human geography by *spatializing* the many concepts offered by Marx. One such concept I draw upon to inform the discussion of scale and its relationship to "place" is the fetishism of the commodity. Simply explained, labor is a social relationship, and since labor produces material things, those things come to represent the social relations that created them. However, when that material thing is exchanged for money it deprives it of its meaning in the social relations that led to its creating. The transformation of social relations into a commodity is referred to as "fetish". This concept is captured in the words of Marx: "labor is not a thing, but a process". Harvey (1999) applies this fetishism to that of the urban by arguing that a city (i.e. place) is not a thing but a process. Thus, we can begin to formulate place as a process that both captures the social relations that lead to the creation of spaces of dependence *and* the external forces (spaces of engagement) that act upon these spaces of dependence. To try and extricate a local process from a global process, Marston (2000) would argue, is based on an erroneous conception of scale.

Scale in the cartographic sense is an ontological structure that is necessary when describing physical properties and processes in space. However, Jones (1998), and Marston et al. (2005) argue that scale becomes an epistemological phenomenon when examining human and social processes in space. Much critical review within human geography has led to dissatisfaction with the dominant conception of scale (Sayer 1991,

Howitt 2002). This dominant view cast such concepts as local, regional, national and global as a vertical network, upward looking in orientation. Socially-produced, horizontal phenomenon such as transnational networks, global production networks, and actor network/power geometries are contrasted with the more familiar vertical approach as substantiation for a reconceptualizing of scale. As Larsen and Johnson (2012, 640) state "As a scientific-cartographic discourse, scale obscures its own social construction within precisely these networks and sites – university campuses, government offices, corporate boardrooms, the research field".

The current round of globalization has brought with it challenges to the usefulness of existing scale conceptualizations. The nature and intensity of social interaction brought about by globalization in the 21st century requires us to abandon previously conceived notions of scale, such as Taylor's (1982). In its place, Marston et al. (2005) offer a 'flat' alternative. Their approach employs a 'site ontology' which attempts to provide the explanatory power to account for the ways that the layout of the built environment – a relatively slow changing collection of objects – can come to function as an ordering force in relation to the practices of humans arranged in conjunction with it. Sites should not be conceived as the familiar 'local', but a milieu actualized out of a complex number of connective potential processes. This is achieved by the 'elimination of scale' from human geography. Collinge (2006) credits Marston et al. (2005) for their contribution to the scale debate as well as to the broader project of analyzing space. At the same time, Collinge points out that the site ontology approach resembles actor-network theory in that they both are "...viewing sites like networks as self-organizing processes in which order is always tenuous and does not precede the practices through

which it is composed" (p. 250). In order for a site ontology approach to be used effectively, social and economic processes must not be viewed as operating at different scales, but that these processes are socially embedded as such are constituted and reconstituted depending on the configuration of geographic scale. In the context of this research, site ontology is used to explore the college campus as the milieu in which social and economic processes operate.

The Role of Place or "All Education is Local"

Globalization presents significant issues of scale that are not properly addressed by most globalization theorists. These problems of scale stem from the fact that globalization is constituted by processes that operate on multiple and overlapping scales that challenge notions of space and hierarchy (Yeung 2002). A former speaker of the U.S. House of Representatives coined the phrase "all politics are local" indicating that a politician's success is a function of their ability to appeal to the needs and interests of their constituents even though most of the issues they are concerned with have national or international focus and implications (O'Neill and Hymel 1995). Similarly, the success of a higher education institution is to a great extent measured on its ability to educate the student in place, even though the subject matter is usually national or global in nature. It is because of this need for higher education to largely 'internationalization in place' the site ontology framework allows a college campus to be situated in the context of the contemporary global world.

While much of the literature on higher education internationalization is focused on the impact of large state institutions (LSIs) in the globalization of higher education, this research focuses on SMLACs as their unique and long-standing commitment to a

liberal arts curriculum is compelling in the context of globalization, and graduates of SMLACs stand to figure prominently in an increasingly information and technology-driven global economy. Much of this attention is justified as public 4-year institutions, while representing a relatively small share of all institutions (15%) enrolled nearly 40% of all students (see Figure 2.1). However, because SMLACs typically have significantly higher graduation rates, they produced 37% of all bachelor's degrees awarded in the U.S. in 2007-08 while only enrolling 20% of the students. This overproduction of degrees relative to enrollment has many explanations, with the most important factor for this research being their size, their control and mission, and their "place", or geographic context. Many colleges, even LSIs, are located in small towns, but the sizes of most of those institutions comprise a significant proportion of the town's population, at least during the academic year (Gumprecht 2003). For SMLACs, their size does not command the same agglomeration effects as LSIs. This distinction in the size of college towns between state institutions and private colleges is one of several factors that contribute to the value of a degree from these institutions to the global economy. As Currid and Connelly (2007, 387) explain:

> …as Molotch (2002) points out, places reinforce their dominance in the dictating of how particular "stuff" is made, despite (maybe even in spite of) the cost factors …that would encourage production to be located somewhere else. The "place" becomes the justification for the product's existence. As Molotch (2002, 684) puts it with regard to particular luxury goods that "although more expensive than they would be if made elsewhere, would not be the same if made elsewhere."

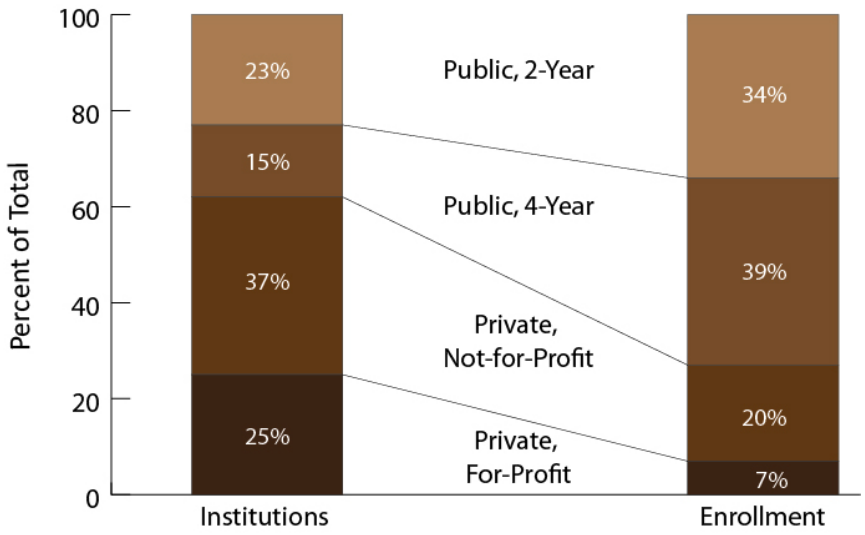
In the case of higher education the "stuff" being made are not just degrees, skills, and competencies, but also student experiences enriched by an environment that is a direct product of "place" – a college graduate is a product both of what is learned in the

classroom as well as that experienced on campus and in the local community (Gumprecht 2003). The analogy to luxury goods is appropriate when the liberal arts college in question is an elite institution such a Smith, Dartmouth, or Wellesley College. Even for those institutions that are not generally considered "elite", the importance of the institution to the student, even after graduation generally remains strong as indicated by alumni satisfaction surveys (Day 2003). This is the main argument for why such colleges limit transfer credits and credits for courses taken online.

SMLACs, like most higher education institutions, continually adapt and change to social and economic circumstances, yet they are more likely to hold strongly to their founding traditions in the liberal arts than are institutions supported by state taxpayers who hold expectations that they will provide degrees in fields that quickly lead to employment. Because they do not receive direct state support[18], SMLACs charge much higher tuitions, and in that way act more like a luxury good in the Molotch context than do large state universities. Conversely, large state universities avoid the luxury label due to efforts from policymakers to keep tuition prices affordable for in-state students and their calls for more degrees awarded in fields that are relevant to the current economy dominate institutional decision making to avoid upsetting state funding formulas (Indiana Commission for Higher Education 2008).

[18] In a few states, private, not-for-profit colleges do receive some direct state support for operations.

Figure 2.2. Institutions and Enrollment by U.S. Higher Education Sector: Fall 2008



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Fall Enrollment Survey; Institutional Characteristics Survey.

Small and Medium Sized Liberal Arts Colleges

SMLACs face a constant struggle to remain competitive in order to continue to attract students to campus. This requires them to provide an array of academic and social offerings comparable to their larger (and less expensive) state-supported institutions. Most recently this competition has spilled over onto the world stage as institutions must prepare students to be effective in an increasingly global economy while at the same time the institutions become international actors themselves through a range of international arrangements – both to further student diversity and to provide international opportunities for academic engagement (Knight 2004). At the same time, these colleges are most often noted for their effectiveness in retaining and graduating students due, in part, to the typically small, rural setting –with characteristics that are well developed in the literature on place, especially by Cox (1995), Cox and Mair (1988), and Massey (2004).

Gumprecht (2003) studied a representative sample of 59 American college towns, with the mean population size of the group being 37,298 in 2000 (where the average college enrollment represented 58% of the town's population). This importance of campus as place is contrasted with the literature on globalization of culture and economy which brings with it questions about the efficacy of the traditional American system of higher education. In addition, SMLACs produce graduates with credentials highly suited to compete and perform in a knowledge economy that emphasizes the ability to learn by "learning how to learn" (Johnson 2010, Schein 1993).

The Oberlin 50

A series of conferences held in the 1980's that brought together the college presidents of 50 liberal arts institutions to discuss science education led to the eventual formation of an informal group of institutions. One of the purposes of this group was to draw attention to the importance of liberal arts colleges to science education. Using National Science Foundation data on students who earned a Ph.D. in a science or engineering field, it was discovered that the Oberlin 50 institutions are overrepresented as the baccalaureate granting institution compared to other institutional categories (see Figure 2.3). Most of the Oberlin 50 institutions are premier national liberal arts institutions with highly selective admissions standards that largely explain their overrepresentation in producing students that go on to earn doctorates[19]. This finding offers important support for the central premise of this research in that a liberal arts education plays a vital role in a nation's educational needs, especially scientific and commercial innovation. It also demonstrates that place is an important aspect of a

[19] The Oberlin Group originally consisted of 50 institutions and has since expanded to 80 institutions. More information and a list of institutions can be found at: http://www.oberlingroup.org/

college education, particularly places that have a small population. Note, for example, that nearly three-fourths of the institutions in the "Oberlin 50" group are located in towns with a population less than 50,000, with a median town size of 32,233. In contrast, over 80% of the institutions in the doctoral granting universities with very high research (DGU-VHR) category of the Carnegie classification are in cities with a population over 50,000, with a median town size of 178,042. In fact, 1 in 4 DGU-VHRs are in a city of at least 500,000 people.

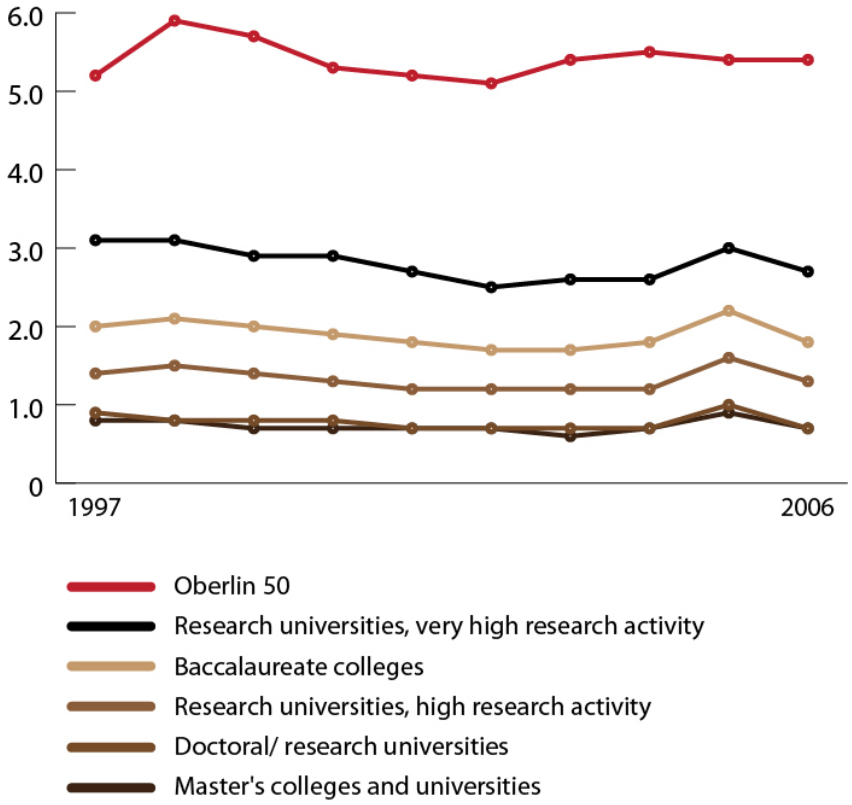
Summary

The global economy increasingly demands workers with an intellect that is well-prepared to think critically in an information-rich environment. Graduates of liberal arts institutions are well suited to meet this labor force demand. While it is true that most U.S. higher education institutions offer a liberal arts program, SMLACs have a greater emphasis on these programs than most public institutions, and given that SMLACs have higher graduation rates, they provide a disproportionate share of the graduates in these fields.

Yet, while higher education institutions are responding to the pressures presented by globalization, they continue to be accountable to federal, state, and even local stakeholders and taxpayers with expectations that they will educate the local population. Institutions are continually struggling to strike a balance between globalization aspirations and their role in the home economy, which itself operates within the global economy. At the federal level, one such instance of this tension emerged when the Canadian government announced a program that offers 75 foreign Ph.D. seeking students full scholarships - each valued at $40,000 Canadian/year for 4-years. The program is

intended to bring elite minds to Ontario and to contribute to the intellectual capacity of the regional economy, and to make Ontario more attractive to the students (and firms)

Figure 2.3. Science and Engineering Doctorates per Hundred Bachelor's Degrees Awarded in All Fields 9 Years Earlier, by 2005 Carnegie Classification and Oberlin 50: 1997–2006.

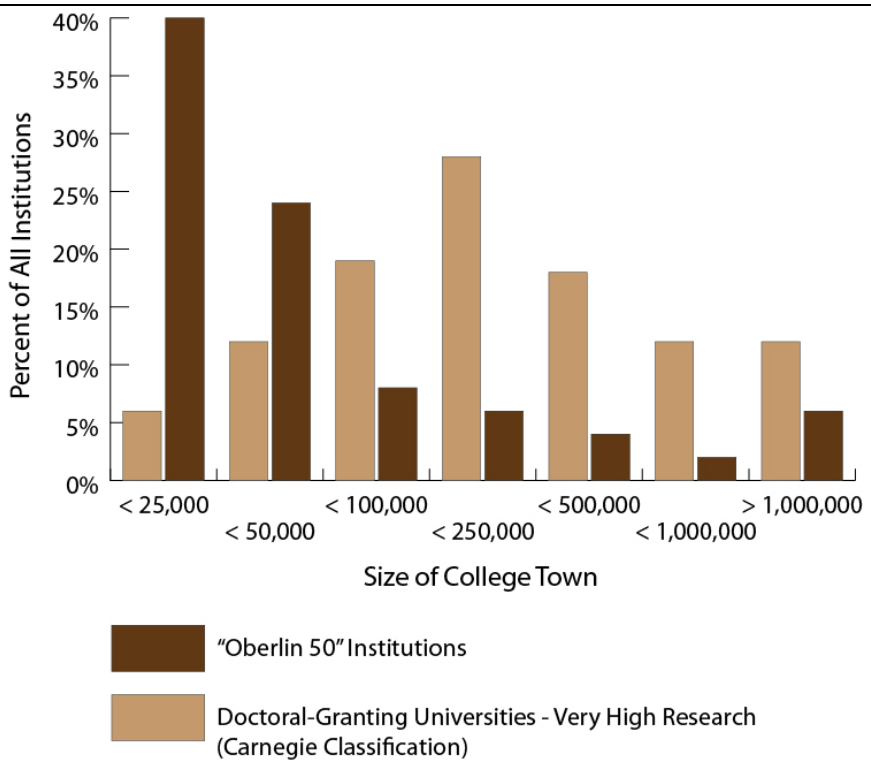


Source: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates.

who might otherwise go elsewhere, particularly the US. Critics argue that such a program takes money away from Canadian students already struggling to pay for college costs and awards it to students who are not citizens of Canada. Similar pressures work in the opposite direction at the state level, as witnessed in New York State where budget cuts have forced institutions to reduce costs. At the State University of New York at

Albany, administrators decided to eliminate the theatre program along with a number of foreign language programs (including French, Italian and Russian). While such liberal

Figure 2.4. Comparison of City Sizes for Institutions in the "Oberlin 50" group and the Carnegie Classification for Doctoral Granting Universities with Very High Research Activity.



Source: U.S. Census Bureau, 2010 Census of the Population.

arts programs are often targeted for elimination to reduce costs because of low enrollments or majors, opponents of the decision cite surprise in eliminating such global competencies given SUNY-Albany's international vision embodied in their current slogan "The World Within Reach" (Jaschik 2010). It is the nature of a liberal arts degree to provide a "global competency", yet the growing demands on institutions to provide increasingly relevant international experiences puts additional burden on resource-poor SMLACs. Therefore the focus of this research is to examine the nature of

internationalization at these institutions and to assess the strategies they might pursue to enhance their ability to provide students with relevant global competencies that allow them to continue to compete for students and contribute to the global knowledge economy.

CHAPTER 3: DATA AND METHODOLOGY

Few techniques exist to measure internationalization at U.S. institutions and those that exist are poorly constructed and analytically insufficient (American Council on Education 2005a, 2005b, Childress 2009). Studies utilizing available techniques also have included few small and medium sized liberal arts institutions. Previous efforts also do not address the contribution of the curriculum of the institution, and therefore leave institutions who emphasize liberal arts programs at a disadvantage since this is their main area of contribution to the global knowledge economy.

A New Measure of Internationalization at Higher Education Institutions

To assist in developing the site ontology framework, a new metric is developed to assess the process of internationalization over time within and between institutions of varying size and sector. This internationalization index provides a standard measure of an institution's internationalization efforts enabling meaningful comparisons to other institutions as well as enabling trend analysis over time on varying institutional characteristics.

There have been relatively few efforts to quantify the extent of internationalization at higher education institutions in the U.S. Among the few, the index developed by the American Council on Education is the most notable. However, the measure is not analytically robust - distilling six dimensions of internationalization into a 0 to 4 scale that, at best, provides for classifying one institution or sector "more active" at internationalization than another. The index developed here relies on measures of international activity using institutional data that will allow for more rigorous statistical tests, while being easy to replicate for any institution, allowing for more definitive

distinctions between institutions that are embracing internationalization. Using direct measures of international activity provides for an objective indication of an institutions ability to provide global competencies to students. To operationalize this measure, the following definition of internationalization in a higher education context is adopted (Knight 2003, 2): "the process of integrating an international dimension into the research, teaching, and services function of higher education".

Research Questions

The review of literature on internationalization trends in higher education highlights several key issues that are to be addressed by this research. First, fundamental to this research is the premise that previous efforts to measure internationalization did not take into account the nature of a liberal arts curriculum and the direct relevance it has to preparing students for the contemporary economy. Second, previous research was guided by the lack of strong evidence of internationalization at SMLACs and was motivated by the fact large public institutions enroll the largest share of students and thus would have a larger and more direct impact on the economy, particularly in this sector's ability to produce degrees in high demand fields such as science and engineering. The result is that we know much more about internationalization at these institutions than we do at SMLACs. Third, by focusing on large public institutions identified as "very active" by an internationalization index that largely ignores the content of the curriculum, previous research has ignored the efforts and ability of SMLACs to respond to the demands of employers in a global economy. Fourth, given the financing model of private higher education found at SMLACs and the increasing competitive pressures introduced by the internationalization imperative, how will they remain financially viable compared to

LSIs? Finally, given that a large proportion of SMLACs are situated in small, often rural towns and cities, how can SMLACs effectively leverage their place when internationalization necessarily involves exposing students to a diverse set of cultural experiences derived from a socially and cultural rich environment?

Formally, this research seeks to answer these questions:

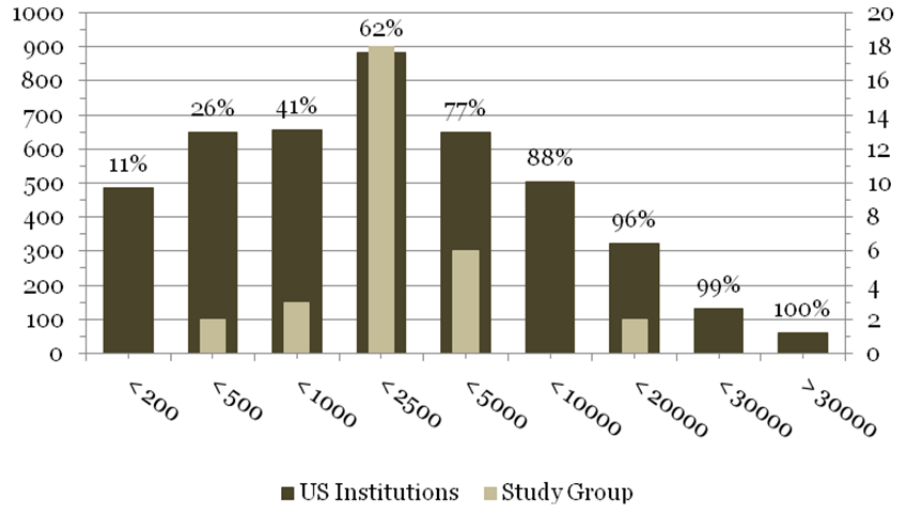
1. How does a liberal arts curriculum provide a student with the skills to be successful in an information-rich global economy?
2. How have SMLACs responded to internationalization and how does this compare to other institutions of higher education?
3. To what extent are SMLACs engaged in and contributing to internationalization and globalization?
4. How does the process of internationalization challenge future viability for SMLACs?
5. How does place as an epistemological construct act as competitive advantage or disadvantage in the higher education industry?

This research will focus on 28 small to medium sized, independent, not-for-profit institutions in Indiana with a primarily liberal arts curriculum (see Figure 3.1). This group of institutions represents a total enrollment of approximately 70,000 students (about 25% of the state's enrollment in 4-year programs) that are geographically distributed across Indiana (see Figure 3.2). These institutions were chosen because they represent all non-profit institutions based in Indiana, and therefore operate within a similar political and economic context as well as a similar higher education policy framework. They represent all non-profit institutions with a main campus enrollment below 10,000 and therefore qualify as being either small or medium sized institutions. In addition, the author has unique access to key campus administrators who directly influence institutional decisions and direction regarding all aspects of the institution, including internationalization efforts. A difference of means test was conducted comparing the study group to the population of private, not-for-profit institutions in the

United States using total enrollment for the fall 2010 semester; this set of institutions are statistically representative. This group of 28 institutions, combined with a reference group composed of the 14 public institutions (referred to as LSIs) in the state of Indiana is referred to as "study institutions" throughout the remainder of this research.

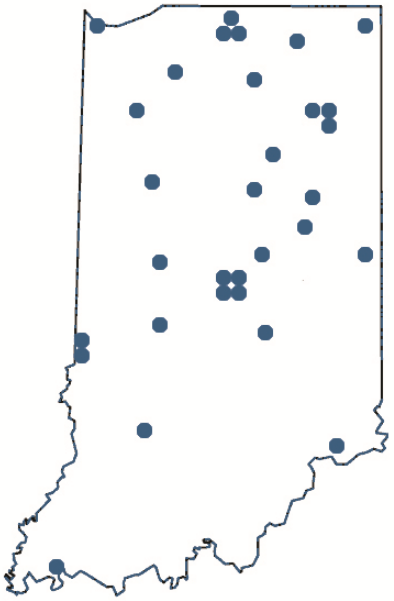
A mixed-method approach is used and consists of three phases. The first phase employs quantitative data to develop the higher education internationalize index. The second phase consists of a survey questionnaire comprised of 36 questions on a range of topics centered on international perspective of institutional curriculum and student life. The survey was administered to all chief academic officers of the study institutions (or their designate). Phase 3 involved interviews with presidents and chief academic officers. Individuals for interview were selected based on the institutional HEI score and institutional size.

Figure 3.1. Distribution of Study Group and U.S. Higher Education Institutions by Enrollment Size: Fall 2008



Source: Fall Enrollment Survey, Integrated Postsecondary Education System, U.S. Department of Education.

Figure 3.2. Indiana Distribution of Study Group



The Higher Education Internationalization Index

A new measure of internationalization at higher education institutions, the 'higher education internationalization' index (HEI), is introduced to allow comparisons of the SMLACs to the control groups, as well as to analyze the progress of internationalization over time. Data were drawn from numerous sources including the study institutions, the U.S. Department of Education, the Institute for International Education, and other sources to assess the extent of internationalization of the campus and in the curriculum at SMLACs in Indiana. The Higher Education Internationalization index includes four main components covering 11 different dimensions that each represents the array of approaches available to an institution in order to demonstrate commitment to preparing students for an increasingly global knowledge economy. The first component, *student mobility*, includes two dimensions: study abroad (SA) and international student body (IS). Together they represent the opportunity for students to be challenged by exposure to different societies and cultures, either by traveling abroad, or interacting with foreign

students on campus. The international studies component is an exploration of the college's course offerings and degrees awarded to determine the extent to which students are able to learn about different world regions and societies during their undergraduate coursework. Chief among curriculum offerings are foreign languages (number of language programs, FLP, and number of language degrees awarded, FLD) which provide an opportunity for perhaps the most intimate cultural appreciation possible in a classroom setting. In addition, course catalogs were reviewed for indications of strong international content (IC) including, but not limited to: area studies, geography, history, international relations, political science, and sociology. However, any discipline has the potential for offering a course with international dimensions – an acknowledged weakness of this approach. In addition, a separate dimension (ISP) is created for degree programs with an particular international focus (such as international studies, or peace and conflict studies). Institutions can also demonstrate commitment to internationalization through its support of faculty studying abroad (FSA) by providing faculty with opportunities to teach, conduct research, or attend conferences abroad. It can also bring visiting international faculty (VIF) from institutions abroad to conduct seminars, guest lectures, or to teach an entire course or courses. Support of this manner is intended to allow faculty or departments to introduce or enhance the international content of their undergraduate courses. Finally, institutions can demonstrate an *international focus* by developing an explicit internationalization plan (IP) and/or create a formal International or Global

Table 3.1 Measures of Internationally Oriented Activity

International Studies Dimension		
	Internationalized Courses (IC)	% of all courses offered
	Foreign Language Programs (FLP):	Simple count
	Foreign Language Program Index (FLPx)	Composite score
	Foreign Language Degrees Conferred (FLD)	% of all degrees awarded
	International Programs (ISP)	% of all degrees awarded
Student Mobility Dimension		
	Study Abroad (SA)	% of student body
	International Students (IS)	% of student body
Faculty Mobility Dimension		
	Faculty Studying Abroad (FSA)	% of all faculty
	Visiting International Faculty (VIF)	% of all faculty
Institutional Focus Dimension		
	Internationalization Plan (IP)	
	Formal International/Global Office or Institute (GO)	
	Arrangements with Overseas Campus (ownership or formal partnerships) (OC)	
Higher Education Index (HEI) =		
	α(FLP + FLD + IP + IC) +	*International Curriculum*
	β(SA + IS) +	*Student Mobility*
	γ(FSA + VIF) +	*Faculty Mobility*
	δ(IP + GO + OC)	*Institutional Focus*
	Where α, β, γ, and δ are term weights	Average; based on responses of interviewees

Office (GO) to oversee the institution-wide international activities (and possibly to monitor the implementation of the international plan). They can also establish direct linkages with overseas campuses (OC), or in some cases operate a campus outright. Such

arrangements allow institutions to more closely integrate cross-cultural exchanges that provide for a richer student and faculty experience.

International Studies Dimension: Internationalization of the College Curriculum

In order to gain an appreciation for the nature of preparation students at a study institution receive that improves their 'global competency', a detailed inspection of each institution's course catalogs[20] was conducted to determine the opportunities students have at being exposed to the broad range of issues that a global society presents. College catalogs have limitations as a vehicle for determining the extent to which global issues and perspectives are presented in a course. At the course level, the course description that appears in the college catalog can deviate significantly from what is covered in the classroom depending on the instructor. The impact of this is mediated somewhat by the fact that most academic departments at SMLACs have a small number of faculty. Nevertheless, the course catalog is the only data source available on which an analysis of course content can be conducted to the degree necessary for this research. Course catalogs were obtained for the 2011-12 academic year or, if not available, the 2010-11 year was obtained. To establish any trends in internationalization within course offerings, the 2001-02 course catalogs were also reviewed. This year was chosen as the course catalogs would have been finalized prior to September 11, 2001 and it is expected that a significant increase in coverage of globalization and world perspectives occurred over this 10 year period.

Course descriptions in college catalogs are largely the result of a subjective process involving the faculty, department chairs, college deans, registrars, and provosts.

[20] College catalogs were accessed using CollegeSource© Online, a comprehensive collection of institutional course and program catalogs with over 51 million course descriptions and more than 63,000 cover-to-cover college catalogs available in PDF format.

Even for an established course description, there is no guarantee that the instructor will conduct the course in strict accordance with the catalog description. To better capture the actual material covered in a class for global content, a thorough analysis would have to review syllabi and textbooks for each course section taught – a daunting task even at a small liberal arts college. For this reason, the use of course descriptions as a method for determining the level of internationalization of the curriculum (and changes in that level over time) across institutions must be done with caution and the results must be considered only one part of an overall assessment of the level of an institution's internationalization. This important caveat aside, course descriptions provide perhaps the only option for this research in understanding the depth to which students are exposed to global topics and issues such as culture, international peace and conflict, economic development and integration, and environmental issues, to name a few - provided there was an effort to capture such topics in the course description. Of course, an instructor could decide to deviate from the course description, even slightly, and add global content to a course that is not indicated in the course description. The reverse could happen as well.

Course catalogs were initially searched for any course that used the words "world", "global", or "international" in their course description in a manner consistent with the focus of this research. Courses including more than one of these words were counted only once. The presence of these words was then evaluated for whether they were used to indicate an internationally meaningful aspect of the course or whether they were merely a formal usage (e.g. History of the United States Since *World* War II) or an ordinary usage (e.g. "*world*-class" or "the natural *world*").

In addition to a keyword search, a number of courses were considered to have a natural "global" component without an explicit reference to a keyword in the course description. Courses in fields such as human geography, history, and sociology course descriptions were included despite the absence of the words global, international, or world in the description. For example, a course titled "History of Ethnic Conflict" that contains the reference to conflicts in non-Western societies would be included.

All foreign language courses were included on the principal that through learning of a language the student was also made aware of historical, social and cultural dimensions embedded in the language. Most upper level courses in foreign languages include a more in depth study of literature and even cinema that provides a richer understanding of the geographic, economic, and political aspects of that language's cultures and countries. Similarly, most area studies courses were included provided their descriptions indicated the course provided students with a sufficient global context for that country or region or the area itself was of sufficient global importance (e.g. "Modern China") that the understanding gained through taking such courses would contribute significantly or uniquely to the development of global competence.

Despite the subjective nature of developing course descriptions, every effort was made to conduct the course content review uniformly across institutions even though a significant amount of personal judgment was necessary. In the end, a course was given the benefit of the doubt so long as it did not focus on one country (such as the U.S.), referenced a "global" component, or covered a topic of global or regional significance beyond the United States.

For each institution, the total number of courses that met the above criteria was calculated and that number was then divided by the total number of courses in the undergraduate course catalog to determine the percentage of all courses that could be considered to provide students with global awareness or perspective.

Foreign Language Courses

The study of foreign languages provides a unique perspective and an intimate understanding of other cultures and societies. In the contemporary global knowledge economy, the usefulness of studying a foreign language should not be contested (Roberts, et al. 2001). However the means and purpose of language study remains open to debate. Many view language acquisition with an instrumentalist focus often resulting in a narrow set of goals. In this view, university language departments are often configured to provide two or three years of fundamental language structures and vocabulary that feed into upper division courses on literature. A broader, more comprehensive approach seeks to make language acquisition a vehicle in which to more deeply explore language and culture with a cross-disciplinary approach incorporating history, geography, sociology, and communications, as well as being able to conduct research using the foreign language (Modern Language Association 2007).

Because of the unique ability of foreign language acquisition to teach 'differences in meaning, mentality, and worldview' between the native language (English in U.S. institutions) and the target language, a separate foreign language score was developed to represent the unique contributions foreign language acquisition contributes to a student's global competence. Therefore, institutions were assessed for the breadth and depth of their foreign language offerings as an indicator of their capacity to contribute to a

student's global competence. Greater language offerings are critical for giving students a range of languages to choose from depending on their preferred world regional focus. The depth of course offerings in any given language is a strong indication of the institution's ability to provide a student with ample choices to design a curriculum commensurate with the ability to achieve significant cultural and linguistic fluency.

To represent the importance of this breadth and depth, a score was constructed using a combination of course count within a language and number of languages offered. The foreign language score (FLPx) was computed by determining 15 to be the number of courses needed to have a sufficiently rich language major at the bachelor's level (approximately equivalent to two full academic years of language instruction). For each language, the total number of courses was then divided by 15. The FLPx has no upper limit bound as it is a function of the number of courses offered per language and the number of language programs the institution offers.

Foreign Language Degrees Conferred

The ability to function fully and effectively in a foreign language environment and culture is a significant indication of a person's global competence. Such bilingual or multilingual ability enables a person to more easily break out of an ethnocentric perspective and to more easily appreciate additional cultures. Earning a bachelor's degree in a foreign language is not sufficient nor is it necessary to achieve proficiency or fluency in a foreign language, but it provides an adequate indication of a person's strong understanding of a language beyond their native language. This is especially true for traditional aged undergraduates from the United States who is otherwise unlikely to have acquired a proficiency in a second language. Therefore, the number of bachelor's

degrees awarded annually serves as a proxy of student language competence upon graduation. The measure includes foreign languages as either a first or second major as the degree requirements are typically the same. The foreign language degrees conferred measure (FLD) is expressed as a percent of all degrees conferred. Data for foreign language majors is taken from the Integrated Postsecondary Education Data System, U.S. Department of Education.

International Programs

This dimension combines degree programs that have a particular international focus and includes area studies, peace and conflict studies, general liberal arts, international relations, international studies, and multi/interdisciplinary majors. These programs also have an interdisciplinary approach that make these majors deeply rooted in the heart of a liberal arts tradition. This mission statement from the international studies program at Indiana University[21] captures the essence of many of these majors and offers a strong justification for international programs inclusion as a separate measure for the internationalization index:

> The International Studies major provides an intellectual foundation that will enable students to communicate, collaborate, and work across national, cultural, and socio-economic boundaries by capitalizing on the exceptional strengths in the international arena for which Indiana University has long been recognized to provide a first-rate, broad-based, intensively organized curriculum, which will contribute to their intellectual understanding of the world's interrelationships and to their ability to bring to the state a new level of internationalization.

These international programs engage the student in a study of nations and relations between nations on a broad range of social, cultural, economic, and political topics and issues making their academic experience unique in its ability to understand and interpret

[21] Indiana University website: http://www.indiana.edu/~intlweb/mission.shtml

global economic and environmental issues as well as peace and conflict challenges. As such, students graduating with an international program degree arguably receive the most thorough preparation to appreciate and analyze internationalization due to its interdisciplinary nature and focus on conflict and cooperation among nations. In addition, international programs majors (particularly the international relations major) typically are required to possess foreign language proficiency beyond that required for general bachelor's programs by requiring additional coursework in a single language, or even in multiple languages. An overseas experience requirement is also not uncommon. The international program measure (ISP) is represented as the percent of all majors awarded in a year. Data for majors in this category were taken from the Integrated Postsecondary Education Data System, U.S. Department of Education.

The Student Mobility Component

Study Abroad

In 2009-10, data from the Institute for International Education[22] indicates that 270,604 students participated in some form of study abroad program, and that number has almost doubled in the past ten years. Interestingly, despite this growth, females have consistently participated in study abroad programs at a rate of nearly two to one over males (females accounted 63.5% of all students studying abroad in 2009-10). For U.S. students, more than half of all students' study abroad destination is in Europe (53.5%) followed by Latin America (15%), and Asia (12%). Europe as a study abroad destination has declined significantly in the past ten years while Asia and Africa have both doubled their share of students they host from the United States. Students typically participate in

[22] "Open Doors", Institute for International Education, http://www.iie.org.

study abroad in their junior year (35.8%) or senior year (21.8). Most students (nearly 75%) typically spend one semester or a summer term studying abroad.

The impacts of a study abroad experience are substantial and contribute greatly to the students overall academic and cultural experience. It also arguably has the greatest potential to contribute to "global competence" (McCabe 2001). Such an experience is considered to be such a significant contributor to student global competence and led one institution to mandate a study abroad experience of every undergraduate student with a minimum of at least three weeks studying in another country[23] (Lederman 2006). Citing institutional responsibility to provide students with the knowledge and ability to compete in an international society, colleges are increasingly emphasizing study abroad as an effective and essential element of internationalization plans (Childress 2009, Soderqvist 2007). The benefits of study abroad are well-established elsewhere (Burn 1991, Laubscher 1994). Such studies clearly demonstrate the benefits of study abroad programs. Participation in study abroad is highly correlated with student engagement and student satisfaction. Additionally, study abroad is considered a 'high impact' practice for its ability to provide intensive student learning experiences beyond traditional classroom learning (Kuh 2008). The study abroad dimension (SA) is expressed as a percent of the student body who engages in a study abroad experience in 2010-11.

International Students

In 2010-11, U.S. institutions enrolled 723,277 international students, which represents a 5% increase over the prior year and represents a record high number of

[23] Goucher College (Baltimore, MD; enrollment: 2,300) implemented this policy in the fall of 2005 and remains in effect today. To offset the cost of the requirement, it offers a $1,200 travel stipend to every student. Despite the requirement, enrollments have remained steady.

international students.[24] That total represents 3.5% of the total enrollment at U.S. institutions, a figure that despite recent increases and great annual variability over the past decade has remained extraordinarily stable given the increases in domestic enrollment, especially with the economic recession that has led to a surge in college enrollment. Approximately 62% of these students attend doctoral granting institutions, even though only 45% of them enroll at the graduate level. China is the largest source of international students, representing 21.8% of all international enrollments, followed by India at 14.4% and South Korea at 10.1%. Approximately 63% of financing of their education comes from personal or family funds. Business and management is the top ranked field of study at 21.5% of all students followed by engineering (18.7%), math and computer science (8.9%), and physical and life sciences (8.8%).

Along with internationalizing of the course curriculum, enrolling international students is a significant means by which an institution can "internationalize in place". Institutions have a number of motivations for bringing foreign students to campus. Chief among them is the opportunity to enrich the student cultural experience by improving student diversity and cross-cultural learning through student interaction. Financial considerations are equally important since foreign students are typically able to pay full tuition. Foreign students typically possess desirable scholastic aptitude that increases academic competition. Institutions are often challenged to increase diversity, yet struggle to do that when drawing enrollments from state residents. This is particularly true for private colleges with higher tuition prices. Enrolling foreign students helps institutions meet all three goals of diversity, academic ability, and ability to pay full tuition all while providing international exposure to students. Professional international recruiters advise

[24] "Open Doors", Institute for International Education. http://www.iie.org.

colleges to develop international linkages with countries with strong ties to the United States, a growing middle-class, an appetite for education, and a lack of capacity to absorb many more students domestically. This dimension is expressed as the number of international students as a percent of total undergraduate enrollment.

The Faculty Mobility Component

An effective way for an institution to raise its level of internationalization is to support its faculty engagement in teaching and research abroad. This type of international exposure brings the institution many benefits that may increase opportunities to collaborate with international scholars, improve the attractiveness of the institution to foreign students, and to pursue additional research funding. Similar to the student educational experiences being enriched by student exchange programs, so too are faculty able to expand and improve their teaching and research activities by engaging in travel abroad as well as international collaborations. For example, worldwide between 1988 and 2005 the number of scientific projects that involved international collaborations increased from 26 to 46 percent. In the U.S. that number increased from 10% to 27% over the same time period (Theobald 2007). In 2010-11, there were 115,313 visiting international scholars, a 37% increase over the previous ten years. This increase in international faculty indicates that competition for faculty and research funds will become increasingly global (Institute for International Education 2012).

Faculty Study Abroad

The term faculty study abroad represents a wide range of activities that U.S. scholars may engage in outside the United States. This activity includes teaching, conducting research, presenting research findings and/or participating in conferences, or

engaging in consultative work. The FSA dimension is expressed as the number of faculty studying abroad per 1000 faculty.

Visiting International Faculty

The growing trend of foreign-born faculty visiting or choosing to stay permanently in the United States has received much less attention than has international student activity (Foote, et al. 2008). Aside from the basic data available on international faculty, there is a significant lack of data about intellectual migration of college faculty. Current trends in the migration of faculty to the United States is indeed a reflection of broad internationalizing trends of U.S. institutions and is historically unique. Previous waves of faculty migration saw European scholars seeking refuge in the United States in response to World War II, and later the arrival of British scholars in response to program expansion in the 1960's and 70's (Foote, et al. 2008). The VIF dimension is expressed as the number of faculty studying abroad per 1000 faculty.

The Institutional Focus Component

Internationalization Plan

Many of the approaches colleges may pursue in order to internationalize the institution can be approached on a case by case basis. Tactics such as the course curriculum, study abroad, and enrolling international students can be done in isolation, and may also be strategies that have internationalization as a secondary goal, or even an unexpected benefit. Arguably some institutions pursue international students chiefly for the tuition revenue they represent. Colleges that look to internationalization as a deliberate institutional strategy typically develop an internationalization plan that seeks to exploit all strategies into a comprehensive blueprint with explicit goals that seeks to

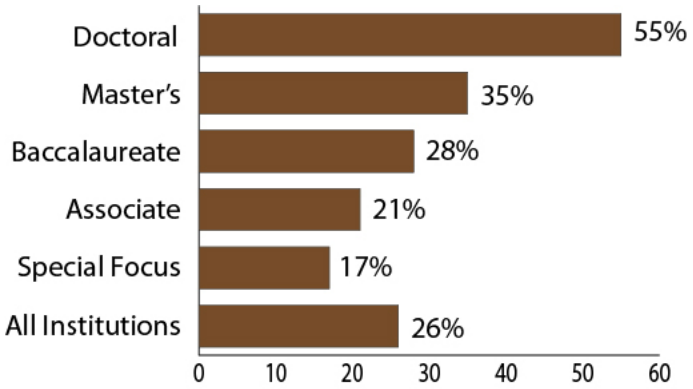
project the institution into an improved competitive standing nationally and internationally. To distinguish spurious international activity from intentional efforts to internationalize, the American Council on Education provides this definition for "comprehensive internationalization":

> …a strategic, coordinated process that seeks to align and integrate international policies, programs, and initiatives, and positions colleges and universities as more globally oriented and internationally connected (American Council on Education 2011a, 3).

Internationalization plans are specifically drafted by the college administration in close collaboration with the institution's board of trustees that agree on a vision for where the institution wishes to position itself in a given time frame. Internationalization plans address specific needs the institution has regarding the many facets of academic offerings, campus life, and intercampus/intercultural collaboration (Knight, 2004).

The advent of formal internationalization plans, comparable to overall campus strategic plans as a necessary administrative planning function, is expected to become commonplace among U.S. institutions. A recent survey found that overall, 26% of all institutions report having an internationalization plan in place, up from 23% in 2006 (American Council on Education, 2012). Not surprisingly, significant differences exists by institutional type with doctoral granting institutions reporting more than half (55%) have internationalization plans in place, a jump from 43% in 2006 (see Figure 3.3). Competition among doctoral-granting institutions is intense since these institutions typically rank high in the top 100 of world universities (Liu and Cheng 2005).

Figure 3.3. Percentage of U.S. Institutions with Campus-wide Internationalization Plans



Source: Adapted from "Mapping Internationalization on U.S. Campuses: 2011 Edition". American Council on Education.

Doctoral institutions have clearly set the pace for internationalization plans and internationally related activity, but some institutions without such plans actively pursue comprehensive internationalization strategies through goals articulated in the institutional mission statements and overall strategic plans. This fact is consistent with the thesis of this research that internationalization is implicit in the curriculum and the core mission of liberal arts institutions and those institutions that integrate a liberal arts core into their institutional values. Yet, as Altbach and Peterson (1998) point out, to internationalize the institution requires not just an articulated strategy, but the financial resources to develop institutional capacity to carry out the plan. Thus, many internationalization plans fall short in times of tight budgets and state budget cuts.

Due to the difficulty in quantifying internationalization plans and international/global offices and the lack of meaningful and standard data, a simple metric is developed to measure this dimension. Internationalization plans are examined for

specific goals to introduce or expand aspects of internationalization used in this study (see Table 3.2). For each instance of an international dimension being introduced, increased, or a specific target goal is established, the institution receives one point. Institutions with a fully specified internationalization plan receive a score of 11. Those without an internationalization plan or internationally oriented mission statement or strategic plan will receive a score of zero (Abbott and Kasprzyk 2012).

Table 3.2 Internationalization Plan Analysis Framework

	Score		
	0	**0.5**	**1**
Explicit reference to an international or global quality in mission statement	No Reference	Implicit Reference	Explicit Reference
Emphasizing internationalization into the curriculum		Referenced	Specific Targets
Expanding foreign language programs		General goals	Specific goals
Increasing the number of foreign language majors or increasing foreign language requirements		General goals	Specific goals
Increasing International, Area, or Ethnic/ Cultural Studies and/or International Relations majors		Establish programs	Expand programs
Increasing participation in study abroad and/or the number of study abroad opportunities		General goal	Specific goal/target
Increasing student diversity through international recruitment		General goal	Specific goal/target
Provide support for faculty to pursue international study opportunities		Establish support	Expand support
Number of international faculty who visit campus for short term teaching and/or research		Begin	Increase
Global office/institute		Establish	Expand
Seeks to add or expand opportunities to partner with overseas institutions		Establish	Expand

Internationalization/Global Office

Institutions establish an office or offices on campus to provide oversight and direction for a wide range of international campus programs. This can include an office to oversee the overall internationalization plan, global institutes to foster student and faculty learning, and research in any number of disciplines (e.g. global business). Such offices are established to facilitate study abroad programs, coordinate visiting international faculty or an international speaker series, foster international collaboration for research and development and to secure grant funding for these activities. The global office (GO) dimension is incorporated into the internationalization plan (IP) dimension framework (see Table 3.2).

Overseas Campuses/Partnerships

Perhaps the strongest statement of an institution's commitment to internationalization is the effort to develop a physical presence abroad in one or more foreign countries. This can be accomplished through a number of means ranging from developing joint programs with foreign institutions to establishing either a wholly-owned and operated campus or a campus operated in conjunction with a host institution, or to establish partnerships with overseas partners in which students may enroll in joint programs (P. G. Altbach 2005). This activity parallels similar activity among other industrial sectors that seek to expand business opportunities abroad and improve overall product quality.

An American Council on Education (2011a) survey on internationalization found that 27% of all institutions have some type of international partnership or collaborative program. The survey found that only 43 institutions (4.1%) report operating a branch

campus overseas. Due to the complex number of options on which to evaluate the contributions of an overseas campus/partnership, this dimension (OC) is incorporate as a component of the internationalization plan (IP) dimension framework (see Table 3.2).

HEI Index Construction and Calibration

The goal of the higher education internationalization (HEI) index is to enable inter-institutional comparisons of levels of internationalization as well as to gauge changes in internationalization over time. An index is sought that is conceptually well developed, easily replicated analytically, and uses readily available data across time and the higher education spectrum. The measures proposed in this project are naturally the compromise between those that are conceptually derived from the literature and from previous efforts to quantify institutional internationalization and the availability of institution level data.

Barnett (et al., 2008) address the many practical and statistical challenges involved in building an index. Their discussion of the United Nations Human Development Index (HDI) provides several guiding principles and practices. Indexes are often built using data that is easy to access, not because of how important they relate to the overall model. This ease of access also improves the likelihood that the model will be repeated for testing and further refinement. Regardless of methodological approach, subjectivity is unavoidable (Vincent 2004).

The United Nations HDI (Anand and Sen 1994) provides a model to emulate for the purposes of measuring internationalization with one major exception. The HDI uses indices that are dependent on maximum values of phenomena (e.g. life expectancy) for the collective group of nations which is a known and finite set. Once the HDI is

calculated it can be used to measure one country to another or to monitor change in the index over time. A similar approach could be taken with higher education institutions (with the current exception of the IC component), although higher education institutions rarely compare themselves to all other institutions. Institutions usually have a number of reference groups to which they compare themselves – based on athletic divisions, admissions selectivity, Carnegie classification, U.S. region, religious affiliation, etc. So for a small liberal arts institution, an index that is based on data that includes large, public, doctoral/research institutions will have the effect of diluting its meaning and usefulness.

Data Sources

Phase One – HEI Analysis

The U.S. Department of Education conducts an annual survey of all institutions eligible to receive federal funds through the Pell Grant program called the Integrated Postsecondary Education Data System (IPEDS). IPEDS provides detailed enrollment data, including international students (IS) and degree completion data (FLD and IP). Study abroad (SA) data is available from the Institute for International Education as are faculty studying abroad (FSA) and visiting international faculty (VIF). Data for foreign language programs (FLP) and international courses (IC) were collected from course catalogs at the study institutions. Information on internationalization plans, presence of global institutes, and partnerships with overseas campuses were collected by the author from the institutions.

Phase Two – Internationalization Questionnaire

A survey instrument was developed and distributed to chief academic officers at the SMLAC institutions. Questions were designed with the intention of exploring college leadership attitudes toward their institution's level of internationalization and their perspectives on their institution's curriculum relative to providing a student with a 'global competency'. The survey was administered online during the summer of 2012. The survey instrument can be found in appendix A.

Phase Three – Interviews with Chief Academic Officers

Interviews of chief academic officers and/or presidents were conducted at a total of 6 institutions depending on their HEI index scores: two at institutions found to have "high" internationalization scores in phase one, two at institutions in the middle of the distribution, and two from institutions with "low" internationalization scores. In addition, two interviews were conducted with institutions exhibiting the highest rates of growth in their international index over time. The purpose of these interviews was to validate the findings in the first two phases, to further explore the assumptions and findings of this research, and to highlight the nuanced role of "place" that may not be detected in empirical data. Since perceptions of globalization, competition, and "place" have strong impacts on leadership decisions, such qualitative interviews are essential to corroborate the trends indicated by empirical data (Schoenberger 1991, Walcott 2001).

Table 3.3 Research Questions and Methods of Analysis

Research Question	Method	Analysis
How does a liberal arts institution provide a student with the skills to be successful in a knowledge-based global economy?	HEI Analysis	Difference of mean analysis of HEI composite and component scores between LSIs and SMLACs
How have SMLACs responded to internationalization and how does this compare to other institutions of higher education?	Questionnaire	Descriptive Statistics
To what extent are SMLACs engaged in and contributing to internationalization and globalization?	HEI Analysis	Difference of mean analysis of HEI composite and component scores between LSIs and SMLACs
How does the process of internationalization challenge future viability for SMLACs?	Qualitative Interviews	Case Study Comparisons
How does place as an epistemological construct act as competitive advantage or disadvantage in the higher education industry?	Qualitative Interviews	Case Study Comparisons

This three phased analysis provided the opportunity to use data from one phase to inform the others. For example, HEI index results were used to help direct interviews. Similarly, survey results and interviews enabled modifications to the HEI index to improve statistical reliability and community receptivity.

CHAPTER 4: ANALYSIS AND DISCUSSION

Before calibrating and calculating the higher education internationalization index, components of the index are first analyzed to establish their differential impact on the overall composite score and to understand their significance between Indiana public institutions and SMLACs in Indiana as well as within institutional sectors for the period 2001 to 2011. Simple difference of means tests for independent samples were utilized to determine if institutions responded to the increased importance of global awareness among their students since 2001. Results of the tests for the differences in means are displayed in Table 4.1.

International Curriculum Components

The first component of the internationalization index seeks to detect the presence of globally/internationally oriented topics and issues in the courses available to students. This is considered one of the most important aspects of the HEI index because it has the potential to impact the most students. Many liberal arts disciplines are naturally internationally oriented, particularly foreign languages, geography, history, sociology and a number of other disciplines. Fields not explicitly international in orientation or emphasis include accounting, chemistry, engineering, and physics among others. In either case, infusing international content or focus into a course is chiefly the responsibility of the instructor, with institutional type and mission having an important influence on course content.

An analysis of course catalogs for the 2001-02 and the 2011-12 academic years was conducted for the study institutions. It is assumed that based on the strong emphasis on the liberal arts among SMLACs, they would have a significantly higher level of

international content within individual courses. However, this assumption was not supported by the data. In 2001-02, LSIs were found to have 9.3% of all undergraduate courses with a measureable international aspect compared to 7.3% for SMLACs. This advantage reversed 10 years later with SMLACs averaging 8.2% of courses compared to 7.6% for LSIs. These averages are prone to a number of measurement errors due to the methodology. It may also be due to the overall increase in the number of courses added to the course catalog relative to courses with international dimensions.

Some caution should be used when interpreting these results due to the difficulty of determining international dimensions in college courses. SMLACs often lack the scale that would allow them to offer courses focused on specifically global topics, leaving them to inject content as a module within existing courses. For example, several LSIs were found to offer upper division courses titled "Climate Change" with course descriptions that reference the scientific and human dimensions of global climate change. Few SMLACs offered such special topic courses. Rather, the topic more often appeared in introductory environmental science courses, or as a subtheme within environmental and public policy courses. Failure to include reference to globally relevant or international content masks the degree to which students are immersed in such topics.

Foreign Language

There are three separate measures of the breadth and intensity of foreign language offerings available: total number of courses offered in foreign languages, total number of bachelor's degree programs in a foreign language, and the number of bachelor's degrees awarded to students in the foreign languages. For foreign language courses, the measure is expressed in number of courses rather than as a percent of all undergraduate courses.

This is done because an institution's foreign language program is a function of both the institution's mission and classification. By using total courses the level of commitment to foreign languages is revealed reflecting the full set of options available to students.

Foreign Language Programs. No statistical difference was found between the number of degree programs offered at LSIs and SMLACs, however, the number of programs at LSIs is nearly double with a mean of 8.14 compared to 4.65 at SMLACs. In 2011-12, of the 42 institutions in the study, all offered a degree in Spanish, and all but two offered a degree in French, with German being offered by 30 institutions. These were also the same top three programs in 2001-02 (although five institutions dropped their German program since 2001). However, in 2001-02 Japanese was fourth and offered by 16 institutions, while Chinese ranked 6th (following Greek) and was offered at 14 institutions. In 2011-12, 19 institutions offered a degree in Chinese, moving it up to fourth overall, while Japanese was dropped by two institutions making it 6th. In terms of total courses offered in Japanese across Indiana institutions, the number dropped from 154 to 138. The increase in Chinese and decline in Japanese programs mirrors the broader geopolitical shift seen in the global economy. Of the five new programs added in Chinese, two were added by LSIs, while three were added by SMLACs.

Both sectors increased the number of courses offered in foreign language which resulted from adding courses to existing programs as well as those that are part of new language offerings. The growth in foreign language course offerings increased over 14% at LSIs and 7% at SMLACs. The growth in course offerings at LSIs is largely explained by the impressive expansion in the number of languages offered by a state flagship which added 126 courses (a 30% increase). In 2001-02, that institution offered 426 courses in

30 foreign languages. By 2011-12, that number was up to 552 courses in 48 languages. Most of the additional languages are based in Eastern European nations, former Soviet republics, and a number of African languages.

Recent research highlights the lack of methodologies for adequately measuring foreign language heterogeneity within an academic offering (Basu 2011). In order to represent the combination of number of languages offered as well as the number of courses per language, a simple index is developed that allows institutional comparisons to be made. This index is used in construction of the HEI index. For each language, the number of courses offered is divided by 15, and the individual language ratios are then summed. There is no upper bound to this index. The number 15 represents a minimum number of courses necessary to provide a degree program. Typically at a 4-year institution, 48 credit hours are required in the major program, and if courses are 4 credit hours each you would need 12 courses in the major program. An additional three courses are added to arrive at 15 to allow for student choice of courses within a major as well as upper level course options such as senior level independent study, seminars, or individual readings options.[25] Using a measure like this makes it possible to quickly compare institutions foreign language offerings.

Using this index, the language offerings at the flagship LSI have an index of 31.6, almost double the next highest language index, and dwarfs the average overall index across all SMLACs in this study of 4.0. Overall, LSIs have a stronger foreign language offering as indicated by a score of 7.6 in 2011-12 compared to 3.96 for SMLACs. The LSIs in this study actually increased their advantage in foreign language offerings over

[25] The number of courses or credit hours required for a language major varies considerably. For example, at Indiana University, it is typically 36-38. The relative size of the measure is not affected by use of the value 15, as it simply serves to scale the measure.

SMLACs – the differential in the index in 2001-02 was 2.98, but grew to 3.64 in 2011-12.

Foreign Language Degrees. Despite the large advantage LSIs have in language offerings, SMLACs have a statistically significant advantage in the number of bachelor's degrees awarded. In 2011-12, SMLACs averaged 6.2% of all bachelor's degrees awarded in a foreign language compared to 2.5% at LSIs, a difference of 3.7 percentage points. This is an increase since 2001-02 when the difference between the two sectors was 3.1 percentage points. Foreign language requirements are largely identical at 4-year institutions in Indiana so that does not explain this difference. A more likely explanation is a greater likelihood for students at SMLACs to graduate with a second bachelor's degree (a "double major"), and those additional majors are often in a foreign language. The data supports this contention – of the 392 second bachelor's degrees awarded, more than 80% of them were awarded by SMLACs.

International Programs. This measure was originally intended to include the program classifications[26] for international relations, multi-disciplinary, and liberal arts major programs to capture the number of degrees students pursue in order to gain a broad based understanding of area, ethnic, multicultural, and international studies. However, a number of LSIs were in the practice of using the liberal arts degree classification for a large number of their graduates – as much as 50% of all degrees awarded. This practice diminished somewhat by 2011, but the scale strongly favors the LSI sector: an average of 13.1% of all degrees were awarded in these fields, compared to 3.0% at SMLACs. Therefore, the liberal arts degree classification was dropped from the international studies

[26] Classification of Instructional Programs, U.S. Department of Education. http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55

measure. This brought the data for this dimension more in line with anticipated results: SMLACs averaged 1.7% of all degrees awarded in international relations and multi-disciplinary fields compared to 0.3% at LSIs (significant at the 0.04 level).

Student Mobility

The student mobility component includes two dimensions: study abroad and international student enrollment. Higher education fundamentally involves educating the student in place, but study abroad provides a unique opportunity for the institution to integrate time overseas into the larger curricular and social experience. In addition, international students bring social and cultural experiences to the campus with great potential to benefit all students through increased cultural appreciation.

Study Abroad. Kuh (2008) identifies study abroad as a high impact practice that has been demonstrated to have a significant contribution to student learning. A study of student-reported gains from short-term study abroad confirms that students are better able to work and interact with people of other cultures and better able to function in a global arena as a result of study abroad participation (Zamastril-Vondrova 2005). Survey data from the National Survey of Student Engagement, or NSSE, reveals a significant difference between public and private institutions in the level of participation in study abroad. In 2010-11, 22.4% of seniors at private institutions nationally report having participated in study abroad, compared to 12.8% at public institutions. For institutions with enrollments under 5000, the number increases to 23.5% of seniors at private institutions having studied abroad while the share of seniors at similarly sized public institutions who study abroad actually drops to 11.1%. Private, not-for-profit colleges are

traditionally known for encouraging a significant number of study abroad experiences for students over other institutional types.

These general patterns of study abroad are reflected in data for the study institutions. A significant difference exists ($\alpha = .000$) between LSIs and SMLACs for both 2001 and 2011. It is worth noting that while LSIs have a substantially larger enrollment base, a nearly identical number of students participated in study abroad (5,118 for LSIs, 4702 for SMLACs). This translates as 6.4% of all students enrolled at SMLACs compared to only 1.7% at LSIs.

International Students. International enrollment at study institutions has a tendency to fluctuate from year to year. In order to develop a representative and reliable measure of international enrollment, a percentage of total institutional enrollment was used, with the numerator expressed as the average of three academic years centered on both 2009-10 and 2001-02. International enrollments can be volatile for a wide range of circumstances – changing recruitment strategies, foreign government incentives or restrictions, and U.S. visa challenges – to name a few. In addition, because of the small enrollment size at SMLACs, the percent of international students can fluctuate greatly due to a change of just a few students.

In the fall of 2010, study institutions enrolled 10,134 or 4.2% of total enrollment for all institutions. No significant difference was found between LSIs and SMLACs for either 2009-10 or 2001-02. On average, the overall foreign student enrollment at SMLACs was 2.9%, compared to 2.3% at LSIs. Among institutions in 2009-10, one SMLAC had an international study body representing 15% of all undergraduates, while the highest share at an LSI was 8.8%.

Faculty Mobility

Unlike data on student activities in higher education, data on faculty is difficult to obtain that is consistent, reliable, and complete. This is especially true for data on visiting international faculty and faculty study abroad activities. Based on institutional reports on international scholar activity, the availability of data is extremely limited. For example, the U.S. State Department reports that 586 individuals visited Indiana with 21 institutional sponsors in 2011 under the J-1 visa program. However, no additional information is made available, and efforts to obtain detail at the institutional level from the U.S. Department of State proved unsuccessful[27]. To serve as a proxy for visiting international faculty and faculty study abroad activity, historical data from the H1-B visa program and the Fulbright Scholars program was obtained. To account for the small level of activity at SMLACs and the less than complete data on faculty mobility, a full 10 years of data was collected and the average number of scholars was used as a composite statistic as a proxy. This average number of faculty/scholars was then expressed as a ratio per 1000 faculty.

Faculty Study Abroad. Fulbright scholarship data from the U.S. State Department provides an indication of faculty interest in participating in international enrichment for professional institutional benefit. There is a significant difference in faculty study abroad activity in favor of SMLACs, but this result is reported with caution. Given the small size of the faculty at SMLACs, a single Fulbright recipient has a large impact on the faculty study abroad ratio. For example, an institution with 80 faculty that produces a single Fulbright scholar has a ratio of 12.5:1000, where as an institution with 1000

[27] Efforts to obtain J-1 visa data included phone and email requests, as well as filing a request for records under the Freedom of Information Act.

faculty has a ratio of 1:1000. However, the significance of an institution with 80 faculty producing one Fulbright scholar cannot be diminished when it comes to the professional enrichment opportunity and its impact on a small campus community in general, and the learning environment specifically.

Data on visiting international scholars provides a more complete picture when using data on H1-B visa applications. However, there is a sizable discrepancy between data reported by the U.S. State Department and that reported by institutions to the annual survey "Open Doors" conducted by the Institute for International Education (IIE). While IIE does not provide institutional level data for all institutions, it does release data for the top 40 institutions for international scholars. One institution from Indiana appears in the IIE top 40 with 998 reported scholars hosted by the institution while only 94 scholars were sponsored by the institution under the H1-B visa program. This sizable difference between H1-B data and self-reported data presents a difficulty in measuring this key component of internationalization and highlights the significance of J-1 visa information. In the absence of a coherent and reliable data source for visiting international faculty, the H1-B visa data is used and the same 10 year data smoothing approach is used to minimize annual fluctuations. The data also suffers from the effect of small numbers at institutions with small faculty sizes on the overall institutional ratio.

These data caveats notwithstanding, the available data shows sizable but not significant differences among visiting international faculty between LSIs and SMLACs. The difference is more than double with an average of 29 scholars per 1000 faculty at LSIs compared to 14 per 1000 at SMLACs. A number of institutions show no scholars being sponsored under the H-1B program, which is unlikely given their size, status, and

scores for other measures of internationalization. These missing data also make comparisons of visiting international faculty difficult.

Table 4.1 Comparison of Measures of Internationalization at Study Institutions*

	Difference of Means Between Sectors	
	2001	**2011**[28]
Internationalized Courses**	Not Significant (t(40) = -1.499, p = .142)	Not Significant (t(40) = .443, p = .660)
Foreign Language Programs	Not Significant (t(14) = -1.354, p = .196)	Not Significant (t(15) = -1.354, p = .196)
Foreign Language Program Index**	Not Significant (t(17) = -1.692, p = .109)	Not Significant (t(16) = -1.672, p = .114)
Foreign Language Degrees**	**Significant** (t(34) = 2.571, p = .015)	**Significant** (t(35) = 2.612, p = .013)
International Programs	**Significant** (t(16) = -3.576, p = .003)	**Significant** (t(14) = -2.884, p = .012)
International Programs** (alternate)***	**Significant** (t(32) = 1.132, p = .264)	**Significant** (t(31) = 2.139, p = .040)
Study Abroad**	**Significant** (t(32) = 3.259, p = .003)	**Significant** (t(31) = 4.085, p = .000)
International Studies**	Not Significant (t(31) = 1.40, p = .169)	Not Significant (t(30) = .647, p = .522)
Faculty Study Abroad	--	**Significant** (t(17) = 2.462, p = .025)
International Scholar	--	Not Significant (t(7) = 1.611, p = .153)

* A positive value for t indicates that SMLAC > LSI.
** Indicators to be used in constructing the HEI index.
*** International Programs (alternate) excludes the liberal arts major classification.

The measures listed in table 4.1 comprise the explicitly quantitative aspects of the proposed higher education internationalization index. The above discussion details the differences between SMLACs and LSIs at two points in time. Among the important

[28] Every effort was made to use the most recent data available, but in some cases it was not possible to get all data for the same year. In those cases, data as close to the base year of 2011 was used.

findings, the expanded language offerings provided by LSIs do not translate into additional foreign language degrees. Despite offering almost twice as many different language options, SMLACs conferred significantly more bachelor's degrees in 2001 and 2011. SMLACs also awarded significantly more degrees in programs with an international focus when the general liberal arts degree is removed from the dimension. These findings, combined with significantly greater participation in study abroad among SMLAC students, indicate that SMLACs hold an advantage in the areas most closely aligned with a liberal arts education. The areas that LSIs hold a significant advantage in equate to inputs, where SMLACs hold the advantage in aspects that reflect learning outcomes. Before turning to the qualitative aspects of the index, an analysis in the change between these two time periods is conducted to assess the degree to which LSIs and SMLACs increased their level of internationalization.

Table 4.2 shows the results of an analysis in the change in the HEI index dimensions between 2001 and 2011. Among the six quantitative measures of internationalization, SMLACs demonstrated significant growth relative to LSIs in only one category: internationalized curriculum. For the foreign language program index, while the difference is not statistically significant between SMLACs and LSIs, the direction of the test statistic indicates that LSIs actually gained relative to SMLACs. Therefore the increase in internationalization of the curriculum among SMLACs appears to have been in courses outside of foreign languages. There is no direct explanation for this gain in international curriculum, comparisons of course descriptions at SMLACs between 2001 and 2011 is likely attributed to a deliberate effort to better highlight the global aspect of courses, possibly in response heightened awareness of global issues.

Another finding to note is that although the change over the 10 year period is not significant, the positive sign of the test statistic for foreign language degrees, international programs, and study abroad indicate relative increase in emphasis at SMLACs compared to LSIs. This is not unexpected given that these dimensions correlate strongly with outcomes of liberal arts education.

Table 4.2 Changes in Internationalization Activity Between LSIs and SMLACs, 2001-2010*

Internationalized Curriculum	**Significant** (t(40) = 2.361, p = 0.23)
Foreign Language Program Index	Not Significant (t(40) = -1.442, p = .157)
Foreign Language Degrees	Not Significant (t(33) = 1.026, p = .312)
International Programs	Not Significant (t(38) = 1.694, p = .099)
Study Abroad Participation	Not Significant (t(40) = 1.615, p = .114)
International Student Enrollment	Not Significant (t(40) = -.530, p = .599)

* A positive value for t indicates that change at SMLACs exceeds change at LSIs.

Institutional Commitment

Institutional commitment to internationalization is measured based on 1) inclusion of a "global" or "international" dimension in the institutional mission statement, the existence of a distinct "institutionalization plan" or an emphasis on internationalization within the campus-wide strategic plan, 2) the existence of a global office or institute focused specifically on promoting and monitoring institutional internationalization

activities, and 3) existence of arrangements with overseas institutions or overseas campus ownership. Arrangements with overseas campuses must be based on curriculum opportunities beyond just study abroad or other cultural immersion opportunities.

A formal methodology for quantifying these aspects of internationalization was found to not exist within the literature. This provides an opportunity to initiate a new framework in which to provide an assessment of institutional commitment to internationalization. This is a daunting task given the qualitative nature of strategic plans. Therefore, this effort is necessarily modest with hopes that any strengths and weaknesses can be used to explore more robust methods in future research.

For the purposes of this study, institutions are assigned a composite score for institutional commitment. This methodology is modeled on precedents established by Abbott and Kasprzyk (2012) in their review of university climate action plans. Institutions can earn a maximum of one point for each aspect listed in table 4.3 for a possible score of 11. The institutional commitment score is then divided by 11 to give it the same weight as other HEI components.

A Note about Mission Statements

For most institutions an organizational mission statement is a guiding principal that serves to guide organizational decisions, and is the benchmark upon which programs and outcomes are measured. The development of a mission statement is a carefully developed vision that often emerges from a community conversation among institutional stakeholders. Regional accrediting bodies use the mission statement as a point of departure when reviewing an institution's accreditation renewal.

A review of SMLACs in the study group reveals that mission statements contain a number of similarities for liberal arts institutions. Most institutional mission statements are short – consisting of three to four sentences that concisely capture the core essence of the institution. The shortest statement reviewed was 13 words; the longest was 523. Only five SMLACs in the study group make a reference an international/global aspect of the institution. Examples of these statements are shown in table 4.4.

Table 4.4 Mission Statement References to "Global"ization

Students …	*"aspire to be global citizens"*
First in list of institutional core values …	*"global citizenship"*
Institution produces graduates with …	*"global perspective"*
Perspective adopted for its programs vision …	*"a global view"*
Included in list of "highest ideals" of student learning …	*"global awareness"*

Phase One: Higher Education Internationalization Index

The individual measures of the HEI index are mostly compositional (percent of a total) and have the potential of having different scales or ranges. Table 4.5 displays descriptive statistics on the proposed index components for the study institutions. All components are measured in percentages or ratios except for foreign language program index (FLP). As indicated by the descriptive statistics and the data problems with faculty mobility (VIF and FSA) referenced earlier, these two measures are excluded from the HEI index development. For most SMLACs in the United States this should not have a significant impact on their HEI index since SMLACs in this study group had very few, if any, visiting international faculty or faculty studying abroad in any given year.

Table 4.5 Descriptive Statistics for HEI Index Components

HEI Component	*Mean*	*Minimum*	*Maximum*
IC-Internationalized Curriculum	8.0%	1.3%	20.69%
FLP-Foreign Language Program Index	5.2	0.2	31.6
FLP-Foreign Language Degree	5.0%	0%	22.4%
IP-International Studies Degrees	1.3%	0%	16.1%
SA-Study Abroad	4.8%	0%	18.9%
IS-International Students	2.7%	0.1%	15.0%
*FSA-Faculty Study Abroad (per 1000)	0.94	0	4.6
*VIF-Visiting Information Faculty (per 1000)	13.7	0	63.6

*Excluded from HEI index

Descriptive statistics also indicate that while there is variation in the scale and range of the means and maximum values in the individual components, they are of sufficient similarity that no one measure dominates the index. Yet, even in cases where institutions require and/or are able to get students to participate in study abroad (SA) programs at a 100% level, it is argued that such levels should be reflected in the institution's HEI index score. Other components have differing propensities to reach 100% with the obvious exception of international students (IS). Traditionally, a statistical method for addressing the issue of differing range and amplitude in variables is to transform them using a number of techniques depending on the variable type and distribution (e.g. "normally distributed variables"). The drawback to such an approach is that an institution's HEI score depends on a sample of institutions to provide a relative reference. The value and strength of an internationalization index is its ability to be

replicated using widely available data that can be calculated independent of other institutions. These principles are all accurate assessments of the HEI index, with the exception of the internationalized curriculum measure. Index scores were then calculated for each institution in the study group and difference of means tests conducted to determine if any of the models reveal a significant difference between LSIs and SMLACs. Results for the model tests are shown in table 4.6 (detailed individual scores by institution are listed in Appendix B).

Table 4.6 HEI Index Model Specifications

Model 1	Sum of all sub-indices, with the raw data for each measure treated as a scale score ranging between 0 and 1. The sub-index for FLP is excluded.
Model 2	Identical to model 1, with the exception that FLP is incorporated and the interaction between foreign language programs and foreign language degrees awarded is expressed as a product (FLP * FLD) with the resulting value used in the model in its raw data form.
Model 3	Similar to model 2 except that the sub-index product (FLP * FLD) is transformed into a scale score ranging from 0 to 1.
Model 4	All measures are transformed to a scale score ranging from 0 to 1, and sub-indices are aggregated.
Model 5	Similar to model 4, but sub-indices are averaged rather than aggregated.
Model 6	Similar to model 4, but sub-indices are weighted based on average responses from community of experts (see Phase 3 discussion, below).

The results indicate that two models, model 1 and model 4, both produce outcomes that point to significantly higher levels of internationalization at SMLACs with the other models showing no significant difference. Conceptually, model 4 is preferred over model 1 for its inclusion of foreign language program intensity (FLP). Model 4 is

also analytically stronger for its use of a widely accepted transformation into a scale score. Model 3 (the sum of raw data and transformation of FLP*FLD) was insignificant, but the sign favored the LSI group which was expected given the large advantage LSIs have in the scale of foreign language offerings. The lack of significance in model 5 demonstrates the impact of averaging sub-indices compared to the aggregating of sub-indices in model 4. The occurrence of a statistical significance does not render one model more suitable than another. Model 4 uses the transformation used in the UN HDI and avoids most of the criticisms surrounding the use of indicators of social phenomena. Therefore model 4 is the most robust and is the preferred model.

Table 4.7 Results of Higher Education Internationalization Index Models*

	Model					
	1	2	3	4	5	6
t-value	**2.391**	.837	-0.64	**2.064**	1.312	1.891
Sig (2-tailed)	**.022**	.408	.949	**.046**	.197	.066
Mean difference	**0.109**	.0237	-0.006	**0.602**	0.092	1.796

* A positive value for t indicates that change at SMLACs exceeds change at LSIs.

Phase Two: Survey Results

A web-based survey was distributed to presidents and provosts of all SMLAC institutions in the study group (28 institutions) during the summer of 2012. A total of 36 surveys were completed representing 26 institutions. In general, responses are consistent with the findings from the internationalization index and strategic plans. For example, respondents were presented with a number of internationalization efforts (the measures of the HEI index) and asked whether they were currently being offered, were planned in the future, and how high of a priority they were to the institution. Responses are shown in table 4.7. Study abroad proved the most important among the offerings with 92% (n=32) indicating they currently offered study abroad and 70% (n=21) indicated this as their

highest priority. Respondents indicate a number of other offerings are also currently provided, but their priority is significantly lower than study abroad. Most surprising of the results is the relatively low importance placed on international curricular offerings, foreign language in particular.

Table 4.8 Survey Responses to International Offerings and Priorities

	Currently Offer	Percent Consider High Priority
Study Abroad Offerings	92%	70%
International student enrollment	89%	52%
Other internationally focused academic offerings	69%	46%
Foreign language requirement for all bachelor's degrees	47%	41%
Internationally focused campus events	89%	33%
Area studies programs/centers	50%	29%
Global/international studies major	47%	19%
Visiting international faculty	42%	12%

Institutional Commitment

Survey respondents were asked a series of questions to establish to what degree they have developed internationalization plans, included internationalization in their strategic plans, and conducted surveys of the campus community (faculty, staff, students) on the topic of internationalization. Only 29% (n=8) of respondents report having an internationalization plan, but 67% (n=24) report including internationalization in the campus strategic plan. However, 69% report having never conducted a survey of the campus community on any aspect of internationalization. Despite the small number with internationalization plans and general absence of campus surveying on the topic, few

respondents reported any real barriers to implementing internationalization plans. For example, only 18% (n=5) reported severe financial restraints. On all other barriers (lack of campus commitment, faculty resistance, lack of coordination, and insufficient demand from students) a large majority of respondents indicated these proved little or no barrier to implementation.

When asked what rationales for internationalization were important to respondents, quality and relevance of the curriculum was cited by 85% (n=28) as most important along with diversity of the student body, followed by student preparedness (82%, n=27). The profile/reputation of the institution was important to half the respondents, while research and knowledge production was important to only 24% (n=8).

International Activities

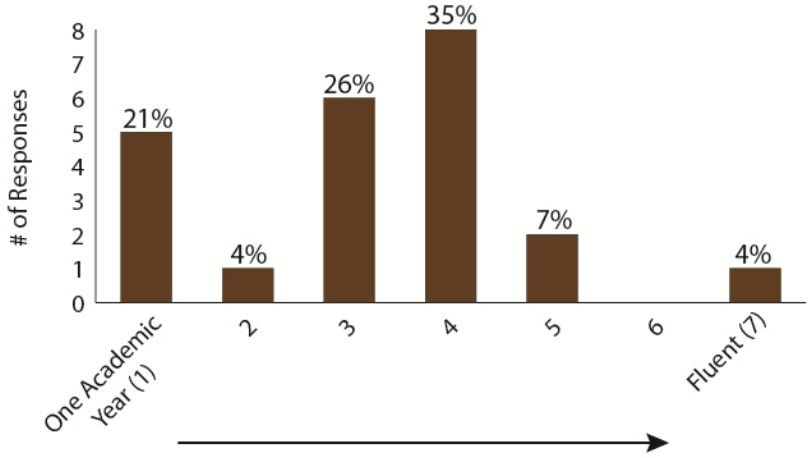
Respondents were asked their perspective on a number of aspects of internationalization. For example, only 6% (n=2) do not actively pursue international students. Normal recruitment efforts and alumni network was the strategy for 47% (n=16) of institutions while the remainder (44%, n=15) used direct recruitment and/or partnerships and agreements with other institutions and agencies.

A similar pattern emerged for study abroad, where 15% (n=5) reported study abroad was not a critical part of the curriculum. An additional 33% (n=11) provided study abroad opportunities but noted that majority of students did not travel abroad. Study abroad was an important or integral part of the curriculum for the remaining 56% (n=18). This pattern is consistent with participation rates that institutions reported to IIE where 10 of the 28 SMLACs in the study group (38%) had participation rates below 1% of all students. To reinforce this finding, 64% (n=21) felt that every student should spend

a term or a year studying abroad. Also consistent, 70% (n=23) indicated they have partnerships with institutions in other countries that facilitate study abroad and faculty exchange.

One of the more surprising findings of the survey relates to foreign languages. International aspects of the curriculum, but foreign languages specifically, did not rate as high as expected, particularly given that one of the goals is to prepare students to work in a global society. For example, while 58% (n=19) felt their institution needed to do more to emphasize foreign language competency, only 27% agreed that a student who graduated with a bachelor's degree should have a foreign language competency; just as many disagreed. The rest of the respondents (45%, n=15) agreed provided there were exceptions. Those who agreed to a foreign language competency upon graduation were asked to qualify what "competency" means. This question used a Likert scale of 7 where a 7 was assigned a competency of "fluent" and 1 was equivalent to one academic year (the typical requirement for most institutions); results are displayed in Figure 4.1. Including the one respondent who wanted to see graduates fluent in a foreign language, 79% (n=18) wanted to see students with a foreign language competency significantly higher than what is gained from one year of a foreign language (typically a two course sequence at the introductory level). Over half of the respondents (52%, n=17) indicated their institution has added or strengthened their foreign language offerings in response to demands of the global economy.

Figure 4.1. Desired Foreign Language Competency for Bachelor's Degree Recipients at SMLACs



Note: Percentages do not add to 100% due to rounding.

Marketing and Peer Comparisons

Respondents were asked questions to determine how important their institution's internationalization level was when it comes to competition for students and to what extent they used this level to promote their institution. For recruitment materials (print, internet, website, etc.), 79% (n=26) actively reference their institution's internationalization level. With regard to what aspects of internationalization institutions use in their promotional materials for student recruitment, responses were consistent with earlier findings. Almost every respondent (94%, n=30) indicated that preparing students for work in a global society as most important, with cultural diversity (84%, n=27) and study abroad (84%, n=27) second. Similarly, when asked which aspects of internationalization were considered most influential to prospective students and parents, respondents cited preparing students to work in a global society highest (55%, n=18) followed by study abroad (30%, n=10), and cultural diversity (15%, n=5). No

respondents cited any of the other aspects – international curriculum, foreign language offerings, or global focus of faculty or area studies curriculum as being important to prospective parents or students.

Given that survey respondents cite only three aspects of internationalization as important in their marketing campaigns, it is interesting to note their perceptions of their level of internationalization compared to their peer institutions. Using a Likert scale of 7 where "7" indicates their institution is more international than their peers and a "4" indicates equal levels, 64% indicated they were similar or more internationalized than their peer institutions. Consistent with this finding, 72% (n=23) indicated that they have not perceived or experienced increased competition as a result of internationalization efforts at peer/competitor institutions.

Even though institutions express little concern regarding competition due to internationalization, 67% (n=20) felt it was of some importance for their institution to rank high if a national ranking were to be published (such as the U.S. News & World Report college rankings). If such a ranking did exist, respondents tended toward thinking they were "not likely" to develop strategies to increase its level of internationalization.

Phase Three: Interviews with Academic Leaders at SMLAC Institutions

A total of six interviews were conducted during the month of October 2012 with provosts or similar academic leaders of SMLAC institutions. The individuals were selected in order to get a mix of perspectives from small institutions with lower scores on internationalization as well as perspectives from mid-sized institutions with higher internationalization scores. In a few cases, institutions had an interim provost or the

individual only recently assumed the position. In such cases alternates were chosen from institutions with similar characteristics and internationalization scores.

The interviews were semi-structured. Subjects were first asked to explain what they felt internationalization of higher education meant to them. They were also asked to discuss areas in which the campus was actively engaging in internationalization. For those elements in the HEI index that subjects did not discuss, they were asked why they were not pursuing those options. Subjects were asked to discuss their foreign language program offering and the degree to which they were satisfied with size of their language departments and degree offerings. Subjects were then given an indication of how their institution ranked among other study institutions and asked to reflect on this in order to both provide an understanding for their current level of internationalization as well as the direction the institution would like to go in the future. The remainder of the interview allowed the subjects to explore those aspects of their campus internationalization, identifying areas they have been successful and where they struggled. At the end, respondents were asked to give a numerical value that weighted the various components of internationalization represented in the model. The averages of these weightings were used in model 6, above. This had the dual purpose of engaging respondents to consider the relative impact of their international offerings, as well as to provide an opportunity to explore an additional model variation.

Several participants indicated that references to internationalization would not be found in their institution's strategic plan largely because they were generally satisfied with their current level, although one admitted that the "Director of International Studies would always like to do more". For the most part, respondents felt the high participation

rates of students studying abroad represented a significant contribution to student global competence. One participant suggested that such trends in higher education are rarely pursued with much vigor until it is either part of an institution's assessment for (re)accreditation purposes, or it is viewed as a source of substantial revenue. In the absence of those two drivers, internationalization would only thrive at an institution based on leadership with a specific vision for internationalization and those types of visionaries are rare at small, tuition-dependent institutions.

There was unanimous agreement among those interviewed that their single best offering to a student's global awareness was their participation in study abroad. Every institution represented by those interviewed has a commitment to providing access to low income students, and particularly first generation college students. This was cited as the biggest challenge to the institution having higher study abroad participation rates. All respondents indicated that for many students the study abroad experience is not just their first time overseas, it's their first time on an airplane. For this reason, it mattered less how long the study abroad experience was because of the value in simply breaking down a perceptual barrier between the student and the larger world in which they live. Often for low income students, a short three week trip abroad is the most they can afford (often made possible by institutional travel grants). Yet anecdotally, respondents felt that it is these students who experience the biggest gain in learning and understanding of culture.

Every respondent also offered that there is concern with study abroad programs being too long. Even though each campus made available travel options that included the short three-week "winter term", semester long, and a full year option, most students participated in either the three-week or semester long experiences. It was only the rare

student who they permitted to take a full year away from the campus, and most often it was in the context of a service mission, rather than an immersion experience. The reason stated was that the institution did not want students to be away from the campus more than a semester. In this they acknowledge that while the value of a study abroad is immeasurable to student learning, it does not replace the value of participating in the community building aspects found on the campus. The liberal arts residential experience is by design an integrative approach and anything more than a semester is considered disruptive to that process. In this way, place establishes its value to the learning process at a time when distance and asynchronous learning is gaining momentum as part of the globalization discourse.

Respondents each expressed the challenges they face in promoting the study abroad opportunities to all students at institutions that use tuition discounting (institutional aid) as a tool in enrollment management. A student who receives such a discount and chooses to study abroad presents a challenge to the institution. Not only is the student receiving a discount (the institution forgoes tuition revenue) they now have to pay the study abroad organization the fees necessary for that student to participate. In other words not only are they not receiving tuition from that student, they are cutting a check to the study abroad company. Such financial considerations present practical restrictions to the number and types of students SMLACs can afford to send abroad in the absence of the students own financial means (or their parents).

Similarly, SMLACs use tuition discounting as a way to attract foreign students as part of their enrollment management strategies. Few SMLACs possess the resources to actively engage in international recruitment or to use recruitment services. All of the

respondents indicated they usually attract international students through the reputation expressed through an alumnus, or students who are already in the United States and looking for a nearby institution. Respondents each expressed that one of the benefits of a small campus is that, in general, it does not take much to have a big impact on their campuses. In fact, several respondents welcomed the diversity that international students bring, but felt that there was a balance that needed to be found since each international student usually represented a significant contribution from the institution in the form of tuition discounting. One respondent even indicated that they typically only enroll international students who come from a part of the world with difficult economic challenges in hopes that they can return to their home country prepared to make contributions to improving the material conditions.

Each respondent inevitably shared an anecdotal story of international students currently enrolled that have become very popular among students and professors. Students become fascinated by the uniqueness of the international student's experiences and the sheer differences in their cultures. Faculty welcomed international students as they were often outspoken and able to provide a richer context to class discussion. Here the small residential campus SMLACs provide creates a social network comprised of close, intimate relationships among faculty, students, and administrators, and where the introduction of just a few international students or study abroad experiences can have significant impacts on student learning. It is here that place becomes a formative component to student learning, and institutional leadership are able to utilize these 'power geometries' among the various institutional actors to achieve desired outcomes.

Similarly, a single foreign-born professor can have a substantial cultural and academic impact on the campus culture and climate. One respondent reflected on the impact a political science professor from Nigeria has had on the community. The popular professor was believed responsible for increasing awareness of critical issues the nations of Africa face through increased enrollments in his courses.

Reflections on Global Competence

At the end of each interview, participants were given two scenarios. The first asked them to consider how their graduating seniors might rank relative to peer institutions on global competence assessment scores (no specific instrument was mentioned just the general concept that such an assessment existed and provided meaningful results). All participants indicated that overall their students would likely rank lower than students at other institutions, but they also all felt that they would expect their "gain" from the time they were freshman through to graduation would likely be higher than similar institutions.[29]

The second question proposed a scenario where the institution was approached by a wealthy, foreign born alumnus who wanted to make a large donation to the institution in order to help the institution greatly improve its reputation for its internationalized

[29] The concept of educational value-added (i.e. "gain") has recently received much attention in higher education due in large part to the drive for assessment and accountability discussed earlier and is embodied in assessment instruments such as the Collegiate Learning Assessment (CLA) and a host of others that measure "an institution's contribution to the development of key higher order competencies" while enrolled at the institution. The Collegiate Learning Assessment (CLA) has formed a key aspect of the nationally recognized Voluntary System of Accountability developed by the Association of Public Land Grant Colleges (APLU) in response to calls from Congress for more transparency among the nation's colleges and universities. The CLA has received significant attention for its ability to help institutions with continuous improvement programs. It has also received significant criticism for its methodology, largely due to the "value added" being a measure of the differences between the graduating seniors and the incoming freshman during the same academic year. In other words, the gain is not based on any student's actual gain, but the difference between two groups at a point in time assuming they have similar academic characteristics and assessment taking abilities. Such criticisms should be addressed in any assessments to gauge global competencies.

curriculum and the global competence of its graduates. The alumnus specifically wanted to start a set of new language programs, but was also interested in other ideas the institution might propose. There was nearly unanimous reaction by participants to this hypothetical situation. While they all welcomed such an opportunity, they would only be interested in launching the new language programs if it proved a good fit with the institution's mission and priorities, and they were complementary to other language programs and other departments on campus. Instead, what each would prefer to do with the investment would be to internationalize the curriculum so that every course they offered had some global or international quality to it, as well as to be able to offer a complete complement of courses to cover all regions of the world to represent the diversity of cultures, religions, philosophies, and traditions. They would also like to see an endowment established to provide financial assistance to students that would help them achieve a 100% study abroad participation rate. A similar interest was expressed in an endowment that would sustain an international affairs office that would provide the capacity to manage and measure all aspects of the institutions internationalization programs. These perspectives were offered with nearly equal emphasis from all interview participants regardless if they had some vestige of these programs already in place. This unanimous response from participants on foreign language was surprising since 58% of responses to the survey indicated their institution needed to emphasize foreign language competency more.

Discussion

Assembling a comprehensive dataset for higher education internationalization activity presented challenges in several respects. The most obvious is a lack of

standardization in definitions on what activities constitute internationalization and from that a lack of complete and consistent data availability. As a result, data collection efforts lack consistency and reliability from year to year from agencies providing data. Internationalization has existed in higher education for most of its history in the United States, but it is only in the past decade that there has been a strong interest in measuring it. It may be some time before data to fully measure internationalization becomes consistently available. Data challenges aside, sufficient data was available to initiate research on the HEI index and to reach some preliminary findings to address the questions presented in this project.

Question 1: How does a liberal arts institution provide a student with the skills to be successful in the knowledge-based global economy?

Higher education institutions largely engage in an "education in place" approach where most of the learning occurs in a classroom setting, and to a lesser extent in the community experiences the campus environment provides. SMLACs are able to achieve a significant advantage over LSIs by emphasizing internationalization in a few, targeted ways – mainly study abroad and foreign language degrees (the latter partially a function of the greater propensity for SMLAC students to graduate with a double major). A larger challenge exists in trying to deconstruct internationalization from the larger liberal arts curriculum, and then to determine whether students who study in a rich liberal arts environment are equally or better prepared for the global economy than students in other programs and institutions. In order for this finding to have validity it must be demonstrated how the study abroad experience is integrated into the curriculum. Several interview participants emphasized that it is relatively easy to get students to participate in study abroad; it is much harder to develop wrap around experiences before and after the

trip, and even harder to fully integrate the experience into their coursework. Students are usually disconnected with the campus during their time away and therefore the experience is too often compartmentalized.

Neither the survey data nor the interviews with academic leaders at SMLACs indicate any signs of concern or institutional stress arising from the introduction of internationalization as a component of institutional competition. Strategic plans indicate only a relatively low interest in adding new dimensions or enhancing existing dimensions of internationalization, and while there was some personal desire on the part of provosts to improve some aspects (such as foreign language competencies) the motivations were for the benefit of the individual students, not to strengthen the institution's position in the higher education marketplace. This is interpreted as an indication that academic leaders are satisfied with the degree to which students are being prepared to effectively participate in the emerging global economy.

There was some indication that foreign language competencies might be constrained by the limited number of languages offered. Since French and Spanish are the two most common languages offered, students may feel these offerings are not of interest or relevant enough to pursue beyond one year. Expanding offerings to languages that show applicability to current global focus (e.g. Arabic or Chinese) may help institutions in introducing expanding language requirements. One respondent indicated that adding a language offering is difficult for a number of reasons, not the least of which is that students almost always pursue a language that they are already familiar with, most often based on something they took in high school. This leaves institutions constrained

to a large extent by what is offered in high schools – typically Spanish, French and to a lesser extent, German.

Institutions also expressed some practical challenges to adding language programs based on their enrollment patterns. Many SMLAC institutions are committed to student access, enrolling a large number of students who are first-generation college students, have high financial aid need, and come from small, rural areas. These students rarely come from high schools that offer language options beyond French or Spanish, and do not bring a strong desire to learn something new. One provost indicated that students choose the institution because they find it comfortable, so we end up with students who will resist things that make them uncomfortable. Foreign languages make them uncomfortable.

Question 2: How have SMLACs responded to internationalization and how does this compare to other institutions of higher education?

Detecting whether SMLACs have responded to the trend toward internationalization was easier to measure quantitatively, but the analysis resulted in mixed results. Only the internationalized curriculum component showed significant increases in the past ten years, yet there was no indication from survey results, interviews, or strategic plan reviews to indicate this was the result of a deliberate and coordinated strategy among SMLAC institutions. More likely this increase is the result of a natural emphasis on global issues that have arisen since 2001, and is driven by individual faculty choices to enhance the relevance of their courses, and to reflect contemporary ethical, scientific, and social issues.

Question 3: To what extent are SMLACs engaged in internationalization and contributing to global competency?

Each aspect of this analysis indicates that SMLACs participate in internationalization in specific and targeted areas. The area of single emphasis has been and continues to be study abroad. Based on the results of model 4, the average study abroad index is almost four times larger for SMLAC institutions (0.36 compared to 0.09 for LSIs). Advantages in study abroad participation combined with a statistical advantage in the production of foreign language degrees results in SMLACs scoring significantly higher than LSI institutions. These results are not sufficiently conclusive to confidently answer this question without further testing of the model across a broader selection of institutions. Since model 4 most closely resembles well tested indicators like the HDI it represents the most definitive finding from the quantitative aspects of this research. The HEI index was not fully specified as conceptually intended due to issues with data for the remaining indicators. Therefore the possibility remains that these missing dimensions may have sufficient influence to erase the results of model 4 and perhaps even swing it in favor of LSIs, especially in areas where constrained resources limit small institutions from creating global institutes or engaging or operating overseas campuses.

Question 4: How does the process of internationalization challenge future viability for SMLACs?

The results of the mixed-method analysis presented here leave this question unanswered and perhaps unanswerable as it was constructed. The absence of any signs of a sea change in institutional strategies as evidenced by campus strategic plans or perspectives of academic leadership likely points to one of two possibilities. One

possibility is that SMLAC leadership is resolute in its belief that their institutions are continuing to provide students with the education they promise through their mission and values, and evidenced by placement rates of their graduates and alumni satisfaction surveys. The other possibility is that the rise of internationalization as a factor of competition has not been present long enough to show any indication of a growing advantage for either large or small institutions. The only area that SMLACs have shown demonstrated expansion in internationalization relative to the LSIs is internationalizing the curriculum. Study abroad has long been a hallmark of a liberal arts education, and participation in these immersion programs remains the primary strategy for SMLACs to provide students with an international exposure that is likely to remain a competitive advantage for the short-term. However, this advantage could erode as LSIs commit to expanding opportunities for their students to study abroad, leveraged by increased opportunities provided through faculty mobility and institutional arrangements with overseas partners.

Alternatively, rather than assume SMLACs would suffer due to the internationalization of higher education, the evidence presented here may indicate that they are thriving in this internationalized environment largely by continuing to emphasize the very aspects that have been hallmarks of their institutional missions: a commitment to the liberal arts curriculum and strong participation in study abroad. Their ability to provide greater integration of social and educational processes is largely a function of their small institutional size, allowing them to provide a social milieu that fosters a learning environment that is well aligned with those successful learning regions described in the literature on the learning economy.

Most SMLAC institutions in the study group were established in the 19th century. In fact half were founded prior to the U.S. Civil War and only four were established in the 20th century. Over their long history, they have faced and weathered many economic and demographic challenges, and today nearly all institutions are at their largest enrollment in their history. A feature in the May 15, 1954 edition of the Saturday Evening Post titled "The Small Colleges Fight for Their Lives" chronicled the various challenges they faced at the time, which was a time of post-war economic expansion. Their long history of surviving prior economic challenges does not guarantee protection against the future economic challenges but it does indicate a culture of adaptability and collaboration that can be used to address the challenges presented by internationalization that ensures their viability.

Question 5: How does place as an epistemological construct act as a competitive advantage or disadvantage in the higher education industry?

The focus on internationalization has understandably been focused on large institutions due to the economies of scale that favor the impact on a large number of students and the ability to provide a broad international curriculum as evidenced by the substantially larger foreign language offerings, and the significantly larger share of graduates in international studies and international relations. International activity is prevalent across the spectrum of higher education at LSIs, particularly in areas that were not covered in the HEI models. Yet, it is due to the size of most residential liberal arts colleges that small numbers can have an amplified effect on a campus. A SMLAC need only have a handful of international students or even one or two foreign-born or visiting international faculty to have a large impact on student's academic and culture enrichment. The small residential college has a vested interest in creating a strong sense

of community and their success is demonstrated by their higher graduation rates and shorter time to degree. One provost even commented that "our students like it here too much. We have a hard time getting students to leave once they graduate." The ability of SMLACs to foster a "sense of place as the singular existential ground for thought, action, and understanding" (Larsen and Johnson 2012, 632) empowers them to realize significant impacts on global competence without needing to make large investments or significant changes in academic or co-curricular activities.

The data collected here make it difficult to prove that SMLACs hold a competitive advantage based on the concept of place as an epistemological construct – a way of knowing and learning about the world. Further research is needed to get at the essence of what meaning place has in student learning beyond anecdotal evidence. The first objective of developing an HEI index required collecting data that made the second objective of exploring college campus as place difficult. Place requires a more intimate set of data that broader macro-scale outcome data. However, two findings from the data provide possible points of departure in future work. The first is the significant advantage SMLACs have in the high impact practice of study abroad. The second is the advantage SMLACs demonstrated in graduating students with foreign language degrees despite their significantly narrower language offerings. Both provide opportunities to explore the mechanisms by which SMLACs are able to provide internationally rich learning environments in smaller intimate learning environments.

CHAPTER 5: SUMMARY AND CONCLUSION

This research attempted to change the nature and direction of the prevailing research within the higher education community regarding the drive toward increased levels of internationalization in all aspects of higher education delivery and operations. The goal of this research was to bring attention to the liberal arts curriculum found at most U.S. institutions, but vigorously promoted at SMLAC institutions. Prior research on the topic has tended to focus predominantly on large public institutions, due to a prevailing notion that they educate the vast majority of students in the United States. This was shown to be true when looking at enrollments, but this position is less accurate when referring to graduates with bachelor's degrees.

It is premature to draw firm conclusions from the data presented here concerning the questions this research set out to answer. The literature on globalization and place were integrated with recent higher education literature on internationalization to inform a conceptual model that could be used to arrive at a measure of internationalization that would recognize the contribution of a liberal arts education to the preparedness of students to succeed in a global economy. The lack of conclusive findings points both to the need to improve the conceptual framework behind the HEI model as well as to improve the data and sources that are used in future analysis if such a claim is to be verified. Data quality and availability issues prevented a full specification of the HEI index leaving room for future work to improve and test the model presented here.

After reviewing institutional mission statements, strategic plans, marketing material, and conducting interviews with those charged with students' personal and academic development, the commitment of SMLACs to providing an intimate campus

environment that is intentionally small and residential to provide a sense of place that acts as a center for "meaning, self-reflection and interpretation" (Larsen and Johnson 2012, 632) is confirmed. This is not to say that large campuses are void of intimacy or are incapable of fostering a community or a sense of place. Students graduate with many friends and relationships, and often become loyal alumni. It is just that large institutions are also capable of fostering a sense of anonymity by acting as a microcosm of the larger society. Such environments provide individual students the option of participating in community, remaining anonymous, or oscillating between the two conditions according to individual comfort level. Establishing a healthy balance between anonymity and intimacy is left to the student. At small residential campuses, such anonymity is rarely an option. Developing a sense of place and belonging to the community is not only an outcome, it is a necessary prerequisite for successful completion. In a globalizing world where the number of possible human interactions is expanding exponentially, the importance of an intimate residential college experience is likely to take on greater value and significance. It does not matter that the small residential college is situated amidst acres of corn fields for it is not the physical elements that define place. Referring to neighborhoods in the Southwest Side of Chicago, Wilson, Beck and Bailey (2009, 607) state, "such microspaces are also seen to carry multiplicity and possibility for transformative human action." The reference to 'multiplicity' invokes Massey's (2005) use of "contemporaneous plurality".

SMLACs boast of small class size and faculty with terminal degrees who give their phone numbers to students not to establish a "one-ups-man-ship" over their larger competitors, but as the human elements that define a sustained and sustaining sense of

place and belonging. The intentionality of institutional leaders to protect such elements that foster place is their defining distinction. Malpas (1999) argues that the emergence of human relationships and meaning need not be grounded in a sense of place. As Malpas states, "it is not place as such that is important, but the idea of human responsiveness – a responsiveness that need not be grounded in any concept of place or locality at all" (1999, 30). The small community environment provides students at SMLACs a strong sense of place that amplifies their 'power geometries' (Massey 2005) in ways that are difficult to measure, but conceptually and anecdotally believed to be far more prevalent at institutions where a small, residential, liberal arts experience is at the core of institutional mission and values.

Global Competence

This research has attempted to explore the degree to which SMLACs, relative to their larger publicly supported counterparts, are able to produce graduates with an awareness and knowledge of the world primarily through their adherence to liberal arts programs and traditions. It is difficult to clearly answer this question, given the data collected in this research. Recently, however, efforts have been introduced to define and assess what the term "global competence" means – or should mean – both academically and practically for the global economy and society. These efforts have also attempted to measure global competency analytically through various assessment instruments. Two of the more well-known efforts are the Global Competency Aptitude Assessment and the Intercultural Development Inventory, which have been developed in the past 10 years. These efforts are not geared specifically toward higher education, but they serve as a potentially valuable means to measure the value added by higher education and a

student's global competence. As these instruments are able to achieve external validity through wider and more varied use, they may become a valuable means for institutions to make the case to students and employers of the value of the education they provide. Future research may be able to use such assessments to measure the correlation between liberal arts curriculum and student global competency.

The term global competence remains a relatively young concept that is likely used by far more people than actually can define it. It has become used rhetorically as if it is intuitively understood at face value – being difficult to define, but having a "recognize it when I see it" quality. One firm uses the following collection of definitions in promoting its assessment tool on its website[30]:

> A global-ready graduate [is] a person with a grasp of global systems, global issues, the dynamics of how things are interrelated and interconnected in the world, and how society can best address global issues.
>
> -Ron Moffatt, Director of the San Diego State University International Student Center
>
> The skills to listen, observe and evaluate, analyze, interpret, and relate.
>
> -Darla K. Deardorff, Director of Duke University's International Education Administrators Association.
>
> The ability to be fluent in at least one other language, such as Spanish or Mandarin; fluency with e-commerce and the Internet; a well-versed knowledge of geography; and, maybe most important, some knowledge of the political and cultural history of one or two countries or regions outside of Western Europe.
>
> - Carol Conway, Director of the Southern Global Strategies Council

These definitions have a strong correlation with what employer's state they are looking for when hiring recent college graduates as indicated by employer surveys, which also

[30] See http://www.globalcompetence.org/

aligns well with the mission and values that drive curriculum and co-curricular activities at liberal arts institutions. Future research that seeks to find alignment of liberal arts institutional missions, global competence, and employer's stated needs should prove a fruitful effort.

Future Directions

One of the significant challenges of this research is the effort in quantifying the international content of courses and course curriculums. In order to draw statistically meaningful conclusions from such data, a large number of courses and institutions need to be reviewed, but information on course content is currently very difficult to discover and is limited to brief course descriptions that are developed through a subjective process. A thorough review of course content must necessarily go beyond course descriptions that appear in an institution's course catalog. This methodology is open to a number of subjectivities inherent in the process of developing course catalogs. To overcome this challenge, it is necessary to investigate course content at a much deeper level that includes reviewing course descriptions, course syllabi, required texts, and possibly exams and examination questions. Yet this may not be enough to enable the researcher to make an objective assessment of international content short of attending every lecture.

One possible means to overcome this shortfall is to develop a standard framework that institutions can use when developing course descriptions. As assessment and accountability become increasingly required and expected of institutions, such a framework will allow institutions to demonstrate the relevance and/or importance to their students as well as the utility for assessment and accreditation. It would provide a standard measure for accreditors to "peek into the classroom" and discover just what it is

students are learning through course work. Another area for determining the degree to which SMLACs have the advantage when it comes to imparting a global competence on its graduates is through work on alumni of the institutions.

Conclusion and Final Remarks

This investigation sought to explore the internationalization strategies of SMLACs in Indiana. This was done out of concern that existing efforts to quantify internationalization had two basic shortcomings: the first being that they lacked analytical sophistication and the methods were not easy to replicate using readily available data. The second centered on the lack of attention given to the curriculum, particularly for the liberal arts. It was argued that the liberal arts curriculum naturally contains a strong international dimension, and that an index that measures institutional internationalization must necessarily reflect the contributions of liberal arts education along with other traditional strategies that institutions use to internationalize. Giddens (1999) makes the case that worldwide social relations are intensifying in ways not experienced before in human history. Even though claims that this will lead to a 'borderless' society (Ohmae 1995) are contested, most notably by Hirst and Thompson (1999), higher education institutions have interpreted the trends toward a globalization of the economy and the larger society as a call to increase the relevance of their educational experiences and outcomes to this new, yet evolving, reality.

The HEI index model presented here has one distinct advantage over prior efforts (American Council on Education 2005a, 2005c) in its inclusion and emphasis of learning outcomes, rather than solely on inputs. Evidence presented here indicates that by incorporating the contributions of the liberal arts curriculum into the internationalization

index, SMLACs are found to have significantly higher internationalization scores. The international dimensions used in the HEI index model are closely aligned with student outcomes. Therefore, the argument was made that students who graduate from a SMLAC are better prepared to live and work in an increasingly global society.

Conclusions presented here are only preliminary; significant research is needed before definitive conclusions can be reached. The HEI index model presented here focuses largely on outcomes that center on liberal arts programs. Future research should consider what other learning outcomes can be measured that benefit graduates in the global economy. Additionally, investigation is needed on the inclusion of both input and outcome dimensions in an HEI index. Another contribution can come from the work needed to improve the identification of international content within the context of coursework. Here accrediting bodies can be influential by developing course description guidelines and indexing standards as well as encouraging institutions to follow them by measuring how closely institutional course work supports institutional missions and strategic plans in the area of internationalization. Finally, the HEI index requires external validation to corroborate that learning outcomes translate into desired social and economic benefits for students.

Higher education institutions are a key component of national economic competition and innovation. They are in an ongoing effort to remain competitive by providing relevant education and preparation, and do so depending on their interpretation of the larger globalization project. This most often involves offering degrees in ways and in fields that prepare students to contribute to that particular interpretation. A well-

researched and specified HEI index must be an important means by which to measure the accuracy of this interpretation.

APPENDIX A: INTERNATIONALIZATION SURVEY INSTRUMENT

Survey on Internationalization Strategies of Small Liberal Arts Colleges

This survey is designed to help guide research on the topic of internationalization among small liberal arts colleges. The term "internationalization" is used generally to refer to an emphasis on global aspects of the curriculum, student academic and cultural experiences, faculty instruction, research, and service, and institutional collaborations and partnerships in order to build global competency among undergraduates.

For each of the following, in the first column, place an "X" if you currently offer or have the program. Place an "X" in the second column for those that do not currently exist but for which you are currently planning. Finally, in the third column, indicate the relative priority of each one in relation to your overall internationalization efforts as either low (L), medium (M) or high (H).

	Currently Have	Currently Planned	Priority (L, M, H)
Study abroad offerings			
Foreign language requirement for all bachelor's degrees			
Visiting international faculty			
Global/international studies major			
Area studies programs/centers			
Other internationally focused academic offerings			
Internationally focused campus events			
International student enrollment			
If you have or are planning any other notable international initiatives, please indicated them in the lines below:			
1 _____			
2 _____			
3 _____			

Does your institution currently have a formal internationalization plan?

☐ Yes
☐ No
☐ No, but one is currently being developed

Does your institution have internationalization as a component of a larger plan, such as a strategic plan or master plan?
☐ Yes
☐ No

Has your institution ever conducted a formal survey of students, faculty or staff regarding any aspect of internationalization? (check all that apply)
☐ Faculty
☐ Staff
☐ Students
☐ We haven't conducted such a survey
If yes to any of the above, what was the focus of the surveys?

Did the findings of the survey(s) result in the addition or enhancement of some aspect of internationalization?
☐ Yes
☐ No
If yes, please explain the nature of the enhancements:

Below are a number of possible barriers institutions encounter when implementing an internationalization plan. For each, indicate the degree to which they were a barrier.
(skip question if you have not considered an internationalization plan)

	Not at all	**Somewhat**	**Moderate**	**Severe**
Financial constraints	☐	☐	☐	☐
Lack of campus commitment	☐	☐	☐	☐
Faculty resistance	☐	☐	☐	☐
Lack of school-wide coordination	☐	☐	☐	☐
Insufficient demand from students for such offerings	☐	☐	☐	☐

☐ Have not implemented a formal strategy

Does your admissions recruiting materials, web site, etc. actively reference the level of internationalization of the institution when recruiting new students?
☐ Yes
☐ No

Which of the following aspects of internationalization are referenced or emphasized in print or verbal communications with prospective students?
☐ Cultural diversity
☐ International Curriculum
☐ Foreign language curriculum
☐ Global/International focus of faculty
☐ Study abroad
☐ Area studies curriculum
☐ Preparing students for work in a global society

In your opinion, which of those selected above is most important or most influential to parents and/or students?

☐ Cultural diversity
☐ International Curriculum
☐ Foreign language curriculum
☐ Preparing students for work in a global society
☐ Global/International focus of faculty
☐ Study abroad
☐ Area studies curriculum

Below are a number of rationales for an institution to pursue internationalization. For your institution, indicate the level of importance of the following:

	Level of Importance				
	1				5
Student preparedness	☐	☐	☐	☐	☐
Curriculum quality/relevance	☐	☐	☐	☐	☐
Profile and reputation of institution	☐	☐	☐	☐	☐
Research and knowledge production	☐	☐	☐	☐	☐
Increase diversity of student body	☐	☐	☐	☐	☐

Considering peer institutions, how do you believe your institution compares in terms of the extent of internationalization?

Less			Same			More
1	2	3	4	5	6	7

With regard to recruitment of international students, which of the following statements most closely describes your institution? *(check all that apply)*

☐ We do not pursue international students, although we do accept applications from them
☐ We pursue international students mainly through our recruitment communications and alumni network
☐ We actively pursue international students through direct recruitment strategies
☐ We actively pursue international students through strategic partnerships and agreements with institutions, corporations, agencies, foreign governments, etc.
☐ Other (please specify):

With regard to study abroad, which statement most closely describes your institution?

☐ Study abroad is an integral part of the curriculum, and encouraged for all students
☐ Study abroad is an important part of the curriculum, and most students who are able travel abroad
☐ Study abroad options are available to students, but the majority of students do not travel abroad
☐ Study abroad is not a critical part of the curriculum, and most students do not travel abroad

In general, if it were financially and otherwise feasible, do you, as provost, believe every student at your institution should spend a term or year studying abroad?

☐ Yes
☐ No
If no, please explain:

Does your institution currently have partnerships with institutions in another country that enable students to take coursework abroad, or allow for faculty exchange for teaching or research purposes?

☐ Yes
☐ No

Has your institution perceived or experienced increased competition for students due to internationalization efforts at peer/competitor institutions?

☐ Yes
☐ No

How strongly do you agree with this statement: "In order for my institution to continue to attract students, we must increase our emphasis on internationalization strategies in the curriculum, student experience, and faculty teaching and research?"

Strongly Disagree			Neutral			Strongly Agree
1	2	3	4	5	6	7

Do you feel your institution needs to do more to emphasize foreign language competency?

☐ Yes
☐ No
If yes, explain:

Do you believe students who receive a bachelor's degree at your institution should graduate with a foreign language competency?

☐ Yes
☐ Yes, but with some exceptions
☐ No

If "yes" to foreign language competency above, what level of competency would you like to see students possess?

Equivalent of one academic year						Fluent
1	2	3	4	5	6	7

Has your institution added foreign language courses/programs, and/or strengthened existing programs specifically in response to the demands of the global economy?

☐ Yes
☐ No

If US News published an "international" ranking of liberal arts institutions based on how well they prepare graduates to compete in a global economy, how important is it for your institution to rank high on the list?

Not important			Neutral			Very Important
1	2	3	4	5	6	7

If peer institutions were to be ranked higher in the area of internationalization by a national media outlet such as US News, how likely would your institution be to develop strategies to increase its level of internationalization?

Not Likely			Neutral			Very Likely
1	2	3	4	5	6	7

Which of the following has your institution added or expanded specifically in response to competing/peer institutions activities?

☐ Study abroad
☐ Foreign Language Requirements
☐ International Faculty
☐ Global Studies Program (or similar)
☐ International Campus Events
☐ International Student Enrollment
☐ Internationally focused academic offerings
☐ Institute or other office on campus specifically focused on international education

Aside from study abroad and international students, and outside of the curriculum, what other international educational opportunities does your institution provide the student?

How long have you been with this institution?

How long have you served as Provost/Chief Academic Officer at this institution?

APPENDIX B: HIGHER EDUCATION INTERNATIONALIZATION INDEX INSTITTIONAL SCORES

Institution	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
1	0.16	0.32	0.25	0.82	0.13	2.65
2	0.19	0.40	0.28	0.97	0.16	3.18
3	0.38	1.60	0.60	2.19	0.44	6.77
4	0.02	0.02	0.02	0.01	0.00	0.03
5	0.59	1.64	0.77	3.28	0.56	10.72
6	0.78	2.07	1.02	4.63	0.75	14.89
7	0.19	0.40	0.26	0.90	0.15	2.71
8	0.41	0.64	0.48	2.19	0.31	6.89
9	0.15	0.25	0.23	0.70	0.11	2.14
10	0.44	1.36	0.66	2.45	0.44	7.62
11	0.14	0.15	0.20	0.71	0.10	2.47
12	0.02	0.02	0.02	0.05	0.01	0.22
13	0.07	0.07	0.14	0.28	0.04	0.81
14	0.24	0.31	0.31	1.22	0.17	4.02
15	0.15	0.28	0.30	0.74	0.12	2.23
16	0.05	0.05	0.07	0.20	0.03	0.61
17	0.11	0.11	0.17	0.55	0.08	2.05
18	0.08	0.08	0.11	0.35	0.05	1.09
19	0.32	0.47	0.39	1.62	0.23	5.02
20	0.15	0.15	0.32	0.72	0.11	2.21
21	0.34	0.41	0.42	1.78	0.24	5.45
22	0.06	0.06	0.07	0.26	0.04	1.09
23	0.35	0.67	0.53	1.91	0.29	6.17
24	0.23	0.33	0.37	1.23	0.18	4.30
25	0.52	4.30	1.05	3.54	0.92	10.86
26	0.05	0.05	0.09	0.21	0.03	0.63
27	0.40	1.02	0.59	2.20	0.37	6.90
28	0.51	1.85	0.72	2.86	0.55	9.30
1	0.14	0.42	0.36	0.71	0.13	2.20
2	0.13	0.27	0.31	0.67	0.11	2.34
3	0.43	2.89	1.43	2.88	0.69	9.39
4	0.06	0.06	0.09	0.21	0.03	0.66
5	0.06	0.06	0.09	0.23	0.04	0.71
6	0.04	0.07	0.15	0.12	0.02	0.38
7	0.15	0.35	0.36	0.74	0.13	2.36
8	0.14	0.31	0.41	0.71	0.12	2.47
9	0.12	0.25	0.27	0.59	0.10	2.01
10	0.13	0.29	0.26	0.61	0.11	1.84
11	0.15	0.35	0.38	0.81	0.14	2.95
12	0.27	0.49	0.75	1.50	0.23	5.67
13	0.06	0.06	0.15	0.23	0.04	0.71
14	0.16	0.36	0.31	0.82	0.14	2.68

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PUBLIC POLICY

- Conduct public policy analysis and research to protect and advance student choice in Indiana's state student aid programs.
- Successfully protected student choice in the state aid maximum award level for students attending independent institutions during the 2011 legislative session.
- Led successful effort to gain $7 million state appropriation for statewide fiber builds from member colleges to Indiana's "I-Light" network in the state's 2007-09 biennial budget.
- Represent independent sector on Statewide Transfer and Articulation Committee of the Indiana Commission for Higher Education.
- Led successful effort to provide unified consortium response to fulfillment of Net Price Calculator federal requirement.
- Led successful effort to change the state dual-credit policy that would have excluded private colleges from providing courses that count toward a state academic honors diploma.
- Develop and distribute messaging through data visualization that promotes the benefits of the independent higher education sector to Indiana.
- Assist in planning and organizing "Student Lobby Day" event to bring students to the state capitol during the legislative session to talk about the importance of state aid to their educational aspirations at independent colleges.

RESEARCH

- Chief resource for data and research on Indiana's independent sector at federal and state level, and for campus presidents, faculty and staff.
- Serve as IPEDS state coordinator for 31 member institutions ensuring accuracy and consistency of institutionally reported data across all IPEDS survey instruments.
- Develop the "ICI Factbook", an annual publication for presidents, trustees, legislators, donors, and state agencies: www.icindiana.org/research.
- Collect and manage the statewide Student Information System (SIS) for members who contribute over 100,000 records annually (sis.icindiana.org) that serves as primary data warehouse to inform public policy.
- Designed and developed a data warehouse to support research and reporting needs for Independent Colleges of Indiana.
- Manage and produce annual high school grade report that provides Indiana high schools with feedback on the performance of graduates in their first year of college: www.gradereport.org.
- Collect data and publish *Fall Enrollment Report* for IACRAO (Indiana Association of College Registrars and Admissions Officers): www.icindiana.org/iacrao/main.asp
- Developed and maintain statewide Student Information System (SIS) for all Indiana colleges for research project funded by the Lilly Endowment. The SIS database is a multi-million student-unit record database covering over 10 years of data for all students in Indiana, and includes over 100 data elements.
- Developed agreements between association and member institutions to govern data exchange policies that ensure student privacy, minimize institutional liability, and comply with FERPA regulations.
- Staff liaison and website coordinator for www.naicuse.net to support the state associations affiliated with the work of the National Association of Independent Colleges and Universities-State Executives.

MEMBER SERVICES

- Coordinate and manage statewide course transfer and degree articulation agreements for member institutions, including statewide dual-credit course transfer database and AP exam equivalencies www.icindiana.org/pal.
- Coordinate annual Instructional Technology Summit providing a forum for ICI member faculty and staff to share and collaborate on their use of technology to enhance student learning and the classroom experience.
- Provide assistance to collaborative services director in managing consortium agreements.
- Administer board management tools for association insurance trust and other collaborative steering groups.

FUNDRAISING

- Certificate in "Principals and Techniques of Fundraising" from The Fund Raising School, Indiana University.
- Collaborate on and provide research for grant writing activities for the association.
- Authored proposal resulting in $150,000 Lilly Endowment grant to provide institutional research support for member institutions.
- Co-authored proposal resulting in $20,000 AT&T grant to provide programming and grant support for campus faculty and staff who use technology in the classroom.
- Co-authored proposal resulting in $15,000 FIHE Venture Fund grant to upgrade student information system.
- Developed "Art31" program to provide scholarships to students in Fine Arts programs at ICI member institutions (video details available at www.icindiana.org/art31.wmv).
- Developed and manage ICI Tech Fund as a philanthropic venture for donors to provide funds in support of instructional technologies for faculty and staff at ICI member institutions www.icindiana.org/techfund.

LEADERSHIP

- State Higher Education Executive Officers Leadership Academy, 2012.
- Member, Board of Directors, Indiana Higher Education Telecommunications System (www.ihets.org).
- Represent ICI president at NAICU Fall Leadership Meeting.
- Supervise research and IT staff.

PROFESSIONAL SERVICE AND MEMBERSHIPS

Service:

- U.S. Department of Education's National Postsecondary Education Council Research and Development Panel (2007-2009): providing policy and research direction for the Integrated Postsecondary Education Data System (IPEDS) and Higher Education Opportunity Act (HEOA).
- U.S. Department of Education's Common Education Data Standards 2.0 (CEDS 2.0): working to develop a set of data standards for consideration and adoption by longitudinal data systems.
- U.S. Department of Education's National Postsecondary Student Aid Study (NPSAS:12): advisory panel for the development and implementation of this unique resource of data on student aid and persistence.

Membership:

- Association of American Geographers
- Association of Institutional Research (10+ year member)

EMPLOYMENT HISTORY

University of Indianapolis 2013 to Present
Assistant Vice President of Institutional Planning and Research

Report to President; responsible for collecting, developing, and maintaining information resources to support the University's mission, strategic planning, and reporting. Provide information and analysis to support administrative decision-making and strategic initiatives; designs and conducts special studies and surveys; prepares oral and written presentations; develops and maintains websites providing information on University facts and statistics; respond to information requests from internal and external constituents; completes surveys and reports for the federal government and private agencies; prepare department profiles and workload analyses for academic program review; support campus-wide assessment and accreditation efforts; and assist campus constituents in using and interpreting institutional data.

Independent Colleges of Indiana 2003 to 2013
Director of Research & Technology

Direct all research and policy analysis efforts and statewide reporting for 31 member institutions; consultation, research, and technical support for fundraising team and Lilly Endowment Community Scholarship Program; provide information technology support and direction.

Creative Analytics, Inc. 1996 to 2004
Director of Research & Development

Led all research and development activities, including a multi-year, multi-campus "Retention & Persistence" effort for ICI members sponsored by the Lilly Endowment.

CONSULTING

Applied Engineering Management 2011 to Present

- State Support Team member: provide direct support to states in their development and use of statewide longitudinal data systems under grants provided by the U.S Department of Education.

Association of Independent Colleges and Universities of Massachusetts 2011 to Present

- Provide research support to association CEO and staff; develop and update case statement materials; provide data and research to address public policy issues facing member institutions.

Association of Independent Colleges and Universities of Rhode Island 2011 to Present

- Provide research support to association CEO and staff; develop and update case statement materials; provide data and research to address public policy issues facing member institutions.

Associated New American Colleges 1997 to 2008

- Provided a variety of research and technology needs to Executive Director.
- Responsible for developing and maintaining the ANAC Data Exchange and association website.
- Developed and managed various survey efforts including a senior faculty survey, an early faculty career survey, and a hiring survey sponsored by TIAA-CREF.

EDUCATIONAL BACKGROUND

Ph.D.	Indiana University	Geography	2013
Master of Arts	Wayne State University	Geography	1992
Bachelor of Science	Michigan State University	Geography	1990

TEACHING EXPERIENCE

Indiana University-Purdue University at Indianapolis
Geography 110 – Human Geography 1996 to Present
Geography 330 – Economic Geography 1997-98
*Favorite Professor Award – IUPUI Athletics, fall 2008, fall 2010, spring 2011

Indiana University – Bloomington
Geography 110 – Human Geography 1993-96
Geography 109 – Weather and Climate Lab 1992-93

Wayne State University
Geography 120 – World Regional Geography 1990-92